BUST! Escom bankrupt after Amiga deal signed

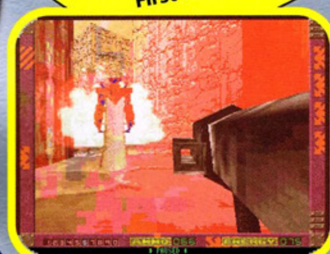
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AMIGA FORMAT

CD VERSION

£5.50 ■ SEPTEMBER 1996 ■ ISSUE 88
Hfl 22.95 ■ US $11.95

GORE BLIMEY!
ALIEN BREED 3D II
Blast 'em, burn 'em, waste 'em and wade through their innards
First full review



Questioning the system

The Amiga has a new owner and it's about to have a new operating system. We show you what this could mean for *your* Amiga

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WORTH THE WAIT?

It has literally taken years for top titler Monument Designer to be translated into English. Can it still be cutting edge?

WORTH THE EFFORT?

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WRITE ON!

Final Writer 5 emerges to do battle with Digita's Wordworth

SPEED UP!

The GVP 68060 and Apollo 1260 accelerators on test inside

ALSO! The CD-ROM roundup including Aminet 12, tutorials for Real 3D, OctaMED, Blitz Basic, Amiga.net, hints, tips and advice in Gamebusters, Workbench and more...

See back cover for details of the CD

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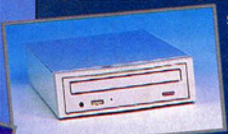
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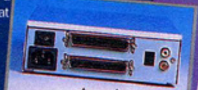
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AMIGA FORMAT CONTENTS

ISSUE 88 SEPTEMBER 1996

AF NEWS



11 Escom? Gone?
Computer "giants" Escom crash and burn shortly after Amiga sale is official – will this complicate the transfer of ownership?

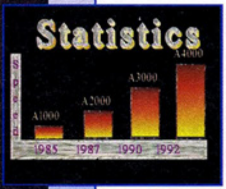
12 White Knight drops prices
England's biggest distributor of high end Amiga video editing solutions makes it all more affordable.

14 Active launch NetConnect
Did you find it hard to get on the Internet? So did Active software which is why they've come up with the layman's solution to getting online.

AF READER SURVEY

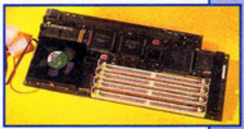
23 1996 Reader Survey
Input required! In order to continue being the world's biggest-selling and, obviously, best Amiga magazine, we need some help from you, the readers. This is your chance to tell us who you are, why you are reading the mag, and which bits you would be reading if they were there. You owe it to the Amiga to fill us in – or something like that.

AF SERIOUS



58 Monument Designer
If video work is your forte and you've got a creative steak then **Graeme Sandiford** has the perfect answer. *Monument Designer* has been very popular in Germany for several years and it's finally been converted into English. Turn to page 58 for the complete run-down on this professional package.

61 Final Writer 5
After *Wordworth 5* from Digita arrived in the *Amiga Format* office we knew that it was only a matter of time before Softwood released their latest version of *Final Writer* and sure enough here it is. **David Taylor** decides whether or not version five of this mighty word pro meets the high standards of its competitor.



68 68060
This accelerator board from GVP for the Amiga 4000 should improve memory capacity, disk drive and processor speed. **Simon N Goodwin** attached it to his Amiga and rigorously tested this accelerator.

71 Apollo 1260
The new Apollo accelerator is incredibly fast and it is also capable of taking up to 32Mb on a single 72-pin SIMM. But is there anything here that can't be found elsewhere? **David Taylor** has all the answers.

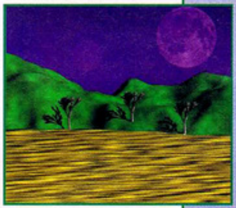


72 CD-ROMs
We've got *Aminet 12*, *Magic Publisher* and *MODs Anthology* to name but a few. **Ben Vost** has had a good look to see which ones you should be adding to your collection.

AF CREATIVE

90 Internet Tutorial
You would soon get bored of the Internet without the ability to send emails. **Darren Irvine** has some useful advice on choosing the right email system.

92 OctaMED Tutorial
Last month we looked at the basic concepts behind *OctaMED*. This month it's time to start thinking about menu options and the basic methods of song construction.



94 Real 3D2
Create your own landscape complete with water, ground and a tree. **Graeme Sandiford** continues his tutorial looking at the new features of version 2.

96 Blitz Tutorial
Now that we can create a Window larger than the screen display **John Kennedy** shows how to integrate it into the existing HTML code.

AF REGULARS

51 PD Select
There's a host of new PD games and utilities reviewed for you this month.

75 Workbench
We get hundreds of Workbench letters every month and we endeavour to help as many of you as we can. **Graeme Sandiford** is the man with all the answers.

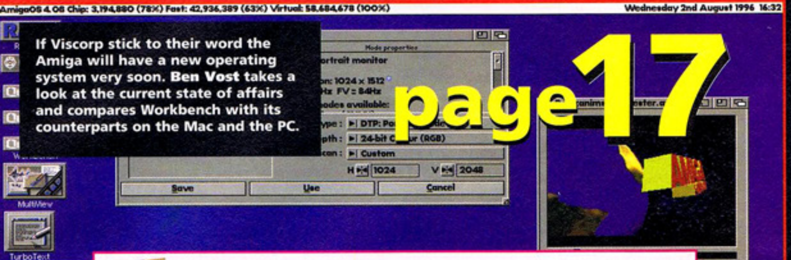


80 Amiga.net
There are new Web sites cropping up on the Internet on a daily basis and **Darren Irvine** has all the details on the new locations that may be of interest to Amiga users.

103 Mailbag
Send your views and opinions in to **Nick Veitch** and he'll think up a witty reply.

COVER FEATURE

Pure GeniOS



If Viscorp stick to their word the Amiga will have a new operating system very soon. **Ben Vost** takes a look at the current state of affairs and compares Workbench with its counterparts on the Mac and the PC.

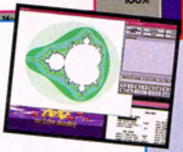
page 17

NETWORKING



24 Networking – part three
In the last part of our feature on networking **John Kennedy** has some final words of advice and some guidance on where to go from here for more information.

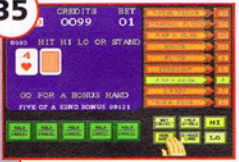
NETBSD



28 Unix For Free
NetBSD, the replacement operating system, is the best implementation of Unix for modern Amigas. With it you can run a huge range of software. **Simon N Goodwin** explains how it's done.

SCREENPLAY

35



Previews: *Joker Poker.*

35 Previews
Andy Smith ponders on the future of the Amiga games market and previews a selection of new games, including several created using the Reality Software Construction Kit from BPM.

39 World Golf
It is notoriously hard to produce a really good golf game on the computer, at the end of the day it's a rather boring game anyway! **Andy Smith** would seem to agree but there are some endearing qualities to *World Golf*.

40



Alien Breed 3D II: Cor blimey!

40 Alien Breed 3D II
It's finally here. Possibly the most important game release this year, the long-awaited sequel to *Alien Breed* could be the saviour of the Amiga games market. With a cohesive storyline, intelligent aliens and ground breaking lighting and sound effects this is one you simply cannot afford to miss.

44 Reader Games
Another selection of games written by you and there really are some good quality games being sent in. Keep up the good work and if your game's the best of the bunch you could find yourself the lucky winner of £50 – another £10 and that's enough to buy yourself two copies of the excellent *Alien Breed 3D II*.

46



Gamebusters: Tips on *XP8*.

46 Gamebusters
If you just can't get onto the next level or you can't find the last gold coin then help may be just round the corner. We've got loads of handy hints, tips and words of wisdom for you to help you on your gaming way.

Coverdisks

X-DVE

Disk A



It's an amazing animation package designed for video titling but capable of much much more

p110

Herman

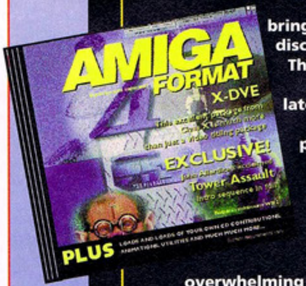
Disk B



Collect the bananas and free the boulders in this nineties style *Boulderdash* clone
Plus: Kumquat

p108

CD-ROM



Another month brings another shiny disc full of goodies. This month's CD is filled with the latest and greatest tools, utilities, program, games, demos – and most importantly of all: your contributions. We've had an overwhelming response to our pleas for content and you've sent in your efforts by the bucketful. See if your contribution is there!

p112



Coverdisk Instructions
AMIGA FORMAT p105

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Golden Image ... ... 55 ... ... 0181 900 9291
Greytronics ... ... 15 ... ... 0181 686 9973
GTI ... ... 31... ... ... 0049 201 788778
Harwoods Computers ... ... 38, 56... ... ... 01773 836781
Hisoft ... ... 10... ... ... 01525 718181
Marpet Developments ... ... 98... ... ... 01423 712600
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Owl Associates ... ... 98... ... ... 01543 250377
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SEPTEMBER 1996

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AMIGA.NET P80
Darren Irvine has calmed down a bit this month and instead of all that moaning he's taken the opportunity to have a good look at some of the latest Amiga related Web sites.



UNIX FOR FREE P28
The Amiga is an extremely flexible platform for running a really wide range of software. NetBSD is a replacement operating system that helps it do just that.



MONUMENT DESIGNER P58
Virtually unknown outside Germany, this titling package could shoot straight to the top on release in the UK.



BLITZ TUTORIAL P96
It's just one man, his *Blitz* compiler and an HTML handbook in a valiant battle against wit and reason. Will he finish the browser before he goes (even more) bonkers?



NETWORKING P32
At last, **John Kennedy** finishes his epic masterpiece on sticking things together, but don't let me spoil the ending for you...



WORLD GOLF P39
Don your golfing shoes and prepare for a quick round on the course. **Andy Smith** takes a look at *World Golf*.

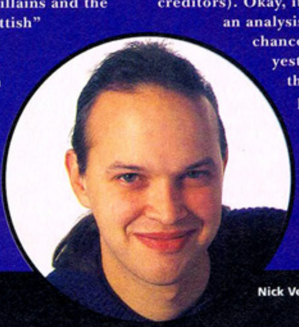
Month In View

Yet more excitement and yet another drama...

Maybe it's just me, but I can't help but think that the Amiga's recent history is somewhat reminiscent of some of the more colourful works of that famous bearded chap, Shakespeare.

I mean, his works were always full of heroes who were also the villains and the victims. Consider the "Scottish" play for example. Escom, spurred on by greed and ambitious partner (german banks)obtain something they don't really deserve (the Amiga) are haunted by ghosts (disenfranchised Amiga owners), have delusions of grandeur (open hundreds of retail outlets all over the UK), tell everyone they are invincible (issue press statements saying no matter how much money they just lost, they have the full support of their backers, and they got rid of the chairman, OK?), and finally get done in by some nobodies (their creditors). Okay, it doesn't bear too close an analysis, but it does give me the chance to say "And all our yesterdays have lighted fools the way to dusty death". So perish all who muck about with the Amiga (Viscorp take note). Hopefully, the Amiga will now escape from typecasting in the tragedy department.

(EXEUNT OMNI)


Nick Veitch, Editor

NEW PRODUCTS... AVAILABLE NOW... NEW PRODUCTS... AVAILABLE NOW... NEW PRODUCTS... AVAIL

iBrowse

a w-w-w well wicked web browser

The fully featured World Wide Web browser, IBrowse makes surfing the net with your Amiga a breeze. Keep abreast of up-to-the-minute sports results, download the latest demos, browse the endless list of diverse and exciting web pages ...

Cruising the whole wired world with IBrowse is no more effort than clicking your mouse button.



ibrowse features

IBrowse Software	£29.95
Net&Web inc. IBrowse	£39.95
Net&Web Pro (TermiteTCP, IBrowse & Email)	£89.95

- ✔ Supports HTML1, 2 and 3 as well as Netscape™ extensions.
- ✔ Uses MUI (included), the new standard in user-interfaces for Workbench and the Amiga.
- ✔ FAB menus™ plus an intuitive drag-n-drop user interface.
- ✔ User interface and window layout can be customised.
- ✔ Cached pages mean instantaneous access to previously visited web sites.
- ✔ Open on any Amiga screen or video card, e.g. CyberGraphX.
- ✔ Play sounds and animations, view pictures and movies using DataTypes (not included).
- ✔ Manual written in plain English.
- ✔ Load stored or cached pages from hard drive or CD-ROM.
- ✔ Takes full advantage of the latest Workbench 3 features.
- ✔ Hotlist to store and organise your favourite web sites.
- ✔ History list shows all the pages explored during a session.
- ✔ Includes FTP plug-in to make downloading files as simple as point and click.
- ✔ Fast and friendly module for gopher hunting.
- ✔ Built-in support for simple email. Send messages from any web page with an email link.

IBrowse needs

- 3Mb free memory
- 3.5Mb hard disk space
- Workbench 3 or later
- Supports Internet connections via AmiTCP, AS225, Mlink or TermiteTCP
- Requires a 68020 processor or faster

NET&WEB

The Internet... Easy as 123

1 EASY TO INSTALL

Installing Net&Web couldn't be simpler, just enter your login name, password and Internet Service Provider then sit back and let Net&Web do the rest

2 EASY TO CONNECT

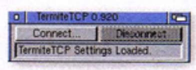
Net&Web is compatible with a wide range of Internet Service Providers (ISPs), including Demon Internet, InternetFCI, CIX and many others. Just choose your ISP from our list and Net&Web will set up your Amiga to connect at their local point-of-presence.

3 EASY TO USE

Surfing with Net&Web is so easy with the super-slick IBrowse (available separately) the powerful MetaTool email program and the DaFTP program for file transfer.

Net&Web Software	£39.95
Net&Web Pro (TermiteTCP, IBrowse & Email)	£89.95

Every Net&Web pack includes one month free Internet trial with either The Net or Demon Internet!



Introducing TermiteTCP

Your Gateway To The World

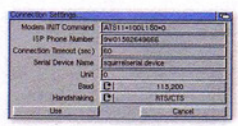
Finally, a TCP/IP Internet connection for your Amiga that doesn't take a Rocket Scientist to configure and use!

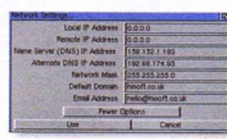
TermiteTCP Software	£59.95

Step 1: Call an Internet Service Provider (ISP) and obtain an internet account.

Step 2: Enter your ISP into Termite TCP's GUI, or choose "Record Logon Script" to have TermiteTCP do it all for you!

Step 3: Click on "Connect" - It really is that EASY!





- Easy-to-use GUI configuration and operation.
- Comprehensive printed manual that takes the mystery out of the internet.
- Written from the ground up at Oregon Research for optimum performance.
- Runs on ANY Amiga with Kickstart 2.04 or above.
- Supports high speed serial cards such as the Surf Squirrel.
- PPP support built directly in.
- Supports multiple configurations.
- GUI telnet and FTP clients supplied, with more in development.
- Programmers' information provided for 3rd party products.
- Patch library to allow AmiTCP apps to work with TermiteTCP.

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AMIGA FORMAT news

- Viscorp reveal future plans for Amiga p12
- Phase 5 to release PowerPC based clone p14
- Lightwave 5 on its way p15
- Bookmark publishing's offer to *AF* readers .. p15

Escom flounder as VIScorp sign the deal



The deal was announced at the World of Amiga show back in April.

Amiga Technology sale agreed, but Escom difficulties may postpone offficial handover.

Finally, the deal to buy Amiga Technology has been signed. Viscorp bit the bullet and finalised the agreement to buy Amiga Technologies from Escom on June 24th. The deal will include all of Amiga Technologies' staff and property, including existing stock, parts and technological expertise. The only thing not included in the deal was the Commodore name and trademarks which Escom are still using to push their range of PCs.

For the time being, Viscorp intend to continue to use Bensheim as the base for the coordination of production and distribution for the Amiga, in spite of Escom's dive into full bankruptcy.

The Amiga community have grown used to twists and turns in the fate of their favourite machine.



In fact, Viscorp seem fairly unconcerned by the whole affair and Florine Radulovic, Viscorp's spokesperson said that "It's business as usual. It might take a bit longer to go through, but it will." When Amiga Format asked her if she had a message for our readers she said that everyone should "just hang in there".

Viscorp's announcement came just before the troubled German giant began its downward slide into oblivion. On the first of July, Escom publicly announced that it was closing down 65 of its 235 shops in the UK with a loss of some 227 jobs. This followed May's revelation that Escom was stopping production of PCs at its German headquarters in Heppenheim resulting in 120 job losses. Industry analysts have suggested that Escom's fall from grace, culminating in a Vergleich order – similar to an American Chapter 11 order and designed to keep bankruptcy at bay by reducing and rescheduling debt – on the 4th of July, was the result of their aggressive expansion into retail in the UK at a time when PC prices are dropping faster than ever before.

This in combination with the Amiga Technologies project, that the sadly ill-informed Financial Times dubbed an "...ill-fated subsidiary which was developing set-top boxes for interactive television...", that had already cost Escom tens of millions of dollars with little perceivable return,



Bill Buck, CEO for Visrop, finally signed the deal with Escom's Helmut Jost on June 24th, days before Escom's tragedy.

and coupled with losses made in market share in the competitive German PC clone market, meant that Escom made full year net losses of over 125m DM, notwithstanding a capital injection of just over 100m DM from shareholders and banks.

It is estimated that the total net loss for Escom this year will end up being around the 180m DM mark. This has led to the banks refusing any further financial aid and Escom, who have now filed for bankruptcy, just days after the deal over the Amiga with Viscorp was signed.

Rumours abound that the Anglo Corporation, the company that saved Silica from a similarly ignominious fate, are well-placed to buy up some, or maybe all, of the shops that Escom is in the process of closing down. Given Silica's commitment to the Amiga range, perhaps we'll see Amigas in the shops again this Christmas.

Escom's self-inflicted worries no longer have any connotations for the Amiga now, as it has escaped oblivion (again) by a narrow whisker.

VIScorp

ENCARTA? NO THANKS, I JUST PUT ONE OUT

Not satisfied with presenting the Amiga's first science fiction/horror special effects tutorial on CD, Epic Marketing have now turned their beady eyes on the encyclopaedia market. One thing the Amiga needs is a good encyclopaedia and Epic have created one each for ECS and AGA aAmiga owners, with hotlist editors for your favourite topics, hundreds of images and sound samples to accompany the text. Being completely produced in the UK should also set it apart from most encyclopaedias that are currently for sale on other platforms.

We can't wait to see this product and we'll let you know just what we think of it just as soon as we can, but if you can't wait and need more information that the fact that it will cost £29.99 and that it should be available by the end of July, you can call Epic Marketing on 01793 490988 to get more details.

PHILIPS SAVE LEISURESOFT

CTW, the computer trade newspaper, reported in the last week of June that Philips were acquiring failing leisure software and peripherals distributor Leisuresoft. Leisuresoft called in administrators earlier this year in March and has been seeling off assets in order to meet debts. One example is the sell off of the TechnoPlus range of accessories to the seemingly insatiable Anglo Corporation, the people who rescued Silica from the brink last year.

On a white charger...

White Kinght Technology have recently been appointed as the official and exclusive UK distributor for all MacroSystem products including the incredible video editing system the Draco, and they are now able to offer software updates, including English manuals, hardware trade-ups (ie. from VLab Y/C to VLab Motion), UK technical support and rapid replacement of items covered by warranty.

In addition, they are also able to offer products rarely seen outside Germany such as the Operator disks and a special version of Monument Designer for VLab Motion.

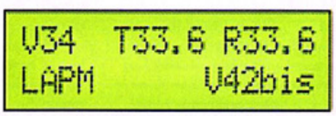
Customers that have already registered with MacroSystem in Germany will have their registrations forwarded to White Knight, but those naughty people who have not yet sent in cards should contact White Knight for details of what to do.

If that wasn't enough, White Knight have also knocked as much as £144 off their range of graphics cards, with the CyberVision64 retailing for just £349, a saving of £70 on the original price. If you've always wanted an RTG graphics card there's never been a better time to buy one. For more details on this and the other items of interest in this news piece, you should contact White Knight Technology on 01920 822321 or fax them on 01920 822302.

Supra launches 33,600 modem

Supra recently upped the potential transfer rate on their premium modem - the SupraSonic, to 33,600 baud. Owners of existing 28.8 SupraSonics can upgrade by using the flashrom upgraders available from ftp.supra.com. The SupraSonic modem improves on Supra's previous flagship product - the Supra v.34 Fax modem by increasing the information area from a two character display to a 32 character LCD readout. This lets all pertinent information to be displayed on the programmable screen rather than switching between as before. The modem is also capable of displaying CallerID information (where available) on this display and acting as an answerphone and voicemail system, providing, of course, that software is created to do such a thing on the Amiga.

Also recently made available on ftp.supra.com is a new version of the v.34 flashrom that will upgrade most recent v.34 SupraFax modems to be able to handle baud rates of 33,600.



EMC SAFARI

EMC in USA

Computer Safari, creators of the popular 'Star Fonts' range of Star Trek-inspired typefaces have been appointed official distributor for EM Computergraphics' range of desktop publishing and video oriented Phase CDs in North and South America and Canada.

Our readers in the new world can contact Computer Safari on (001) 916 661 3328 or fax them on (001) 916 666 1813 and there is a web site at http://www.woodland.net/emc/

A1200xl
Finally here

The internal upgrade for the Amiga 1200 will be shipping at last during August. The A1200xl has been delayed due to the inclusion of the latest Burst-Edo SIMM technology. But, with an amazing AIBB performance rating of 7.14 at 50MHz over the original A1200 it appears that it will be worth the wait.

The A1200xl has been designed to fit in the Amiga 1200's trap door and is equipped with the official 34 way connector for the SCSIxl Utility card, a combined 5Mb/s SCSI II/Enhanced IDE controller, which slots into the Utility card space under the A1200's floppy drive.

The recommended retail price of the A1200xl at 50Mhz with 8Mb of Burst-EDO is £499. For more information contact your local dealer or ACL Distribution on 01933 650677.

I think it's time for a round-up...

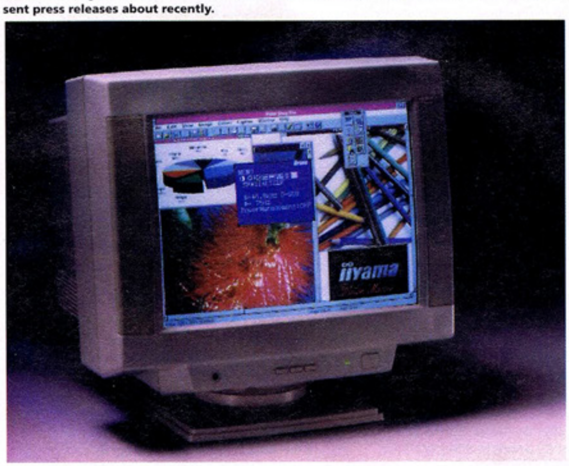
We seem to be swamped with monitor news releases in the Amiga Format offices this month. First up is ViewSonic's hyooooge PT810 monitor that comes in at the enooormous price of £1903 including VAT. It's a 21" monitor capable of displaying 1600 x 1200 at 73Hz refresh and 1280 x 1024 at 85Hz. Now all you need is a magnifying glass to find all your icons. Call ViewSonic on 01293 643900.

Idek proudly present their latest offering this month too. It's a slightly more mundane 17 incher, but Idek have finally added multimedia capabilities to their reknowned Vision Master series. The speakers, as you can see, fit neatly into the side panel leaving no "afterthought" bulges. The amplifier used in the monitor features a doodad called a Spatializer sound processor which apparently gives a 3D surround soud effect so that sounds can appear to come from all over the room.

Idek reckon their monitor can handle a 1600 x 1200 resolution at a pretty satisfactory 69Hz refresh and 1280 x 1024 at 80Hz, which makes it nearly on a par with ViewSonic's offering but a price much kinder to the wallet of £599 plus VAT. If you can't wait to get your hands on one of these beasties, rush to your phone and call 01438 745482.

Just remember that neither of these monitors will sync down to anything less than about 30kHz, so they are both unsuitable for attaching directly to an A1200 or A4000 unless you have a hardware flicker fixer or graphics card of some sort.

Idek's latest model in the Vision Master series has built-in speakers and a headphone socket so that you don't disturb other people (a very good idea in our office) and is the latest in a long series of new monitors from a variety of manufacturers that we have been sent press releases about recently.



Hayes drops prices

World famous modem manufacturer Hayes have announced that they are to drop the price on their range of modems. Jeremy Butt, general manager for Europe said: "Hayes products are reknowned for their high quality and reliability, however, there has been a perception in the market that our products are too highly priced, which has not been justified recently. We have now cut the prices to such a level that no-one will be able to resist a Hayes product."

Formed in 1977, Hayes is probably best-known as the inventor of the modern modem and the Hayes command set. With price cuts of 28% on the Hayes Accura 288 v.34 and Fax modem to bring it down to £169 including VAT, (perhaps the modem most likely to interest Amiga users), Hayes' modems are may appear more favourable to budget-conscious users.

The Bradford Column



It wasn't that long ago that every mention of Amiga's ex-owner Escom was preceded by the word "ambitious", as in "Ambitious PC manufacturer and retailer Escom recently announced..." Judging by what we've been hearing lately though, the press will be substituting "struggling" or "troubled" for "ambitious" when they are collating news stories on the German giant. And all sorts of publications will be devoting plenty of column inches to the group: widespread store closures, horrendous losses, and worse, all make great copy. While we were all wailing and gnashing our teeth saying; "Why don't they throw some of their Deutchmarks at the Amiga?", what we didn't know was they were already overstretched. But that's something most businesses go through at some point. Everything goes well so the powers in charge assume they will continue to do so. It must have seemed so easy: all those High Street locations going begging, the world's best-selling home computer lying dormant – hey, let's snap 'em up before someone else does. Buying the Amiga was the easy bit, though: having the clout to exploit it afterwards was the tricky part of the equation. I hope youíve been paying attention, Viscorp. What's that saying – those who do not learn from the mistakes of the past are condemned to repeat them...

every month this year, Amiga full-price software sales have had over 40% of the market

Some amazing statistics: every month this year, Amiga full-price software sales have had over 40% of the market. On the budget front, Amiga's market share has never dipped below 30%. Every month. Admittedly this is on sales of floppy-based product, and does not include CD, but doesn't that make a nonsense of all the anecdotal "evidence" that certain people throw up to support the assertion that "Amiga software doesn't sell anymore"? The truly amazing part of all this is the split between 500/600 and 1200 though. What would you think it was? Well I'll tell you: on full-price, 500/600 outsold 1200 titles by a ratio of 7:1. On budget the split was a staggering 30:1. What does this mean? That 1200 owners just don't buy much, and the people putting their hands in their pockets are those who have inherited old machines? If any of you are beavering away on a masterpiece which you hope to sell on a commercial basis, perhaps you should reconsider your original idea of making it AGA only – the really successful Amiga titles in recent years (SWOS, Worms, Cannon Fodder) have all been accessible to all users. Makes you think a bit, doesn't it?

The opinions expressed in this column are those of a fine, upstanding individual who can take his beer like a man, even if he does cry like a baby when he falls over on the way home, not those of Amiga Format (who don't).

"Unix is a mainstay of education facilities, and some of the best freely-distributable software has been developed on and for Unix Systems"

UNIX FOR FREE PAGE 24

Easynet



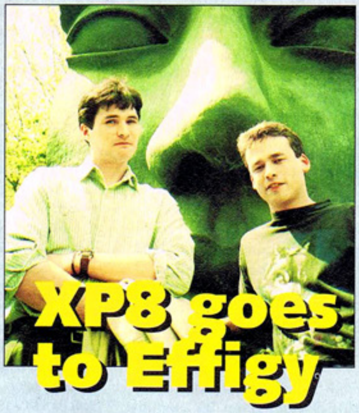
Connecting your Amiga to the internet can be like taking an A-level in applied thaumatological magic – until all these easy installers started appearing anyway.

Until HiSoft brought out Net&Web it was always a bit tricky to set up an internet connection on the Amiga, but now easy installers seem to be flooding in. Active have told us that they plan to bring out a suite of internet tools called NetConnect in the near future. NetConnect will feature an extremely simple to use GUI that takes care of all the configuration you need to do. If you have an account with one of the 107 ISPs catered for by NetConnect, all you'll need do is select the ISP that you've joined, tap in a few details and you'll be away.

NetConnect's backbone consists of a dial up version of AmiTCP/IP v4.3, PowerMail (MetaTool 2), MFTP 2, MNews (currently at version 0.2 on Aminet, Active promise to have a fully working version in their bundle) and AmiPPP in addition to SLIP for connection. As you will have noticed all the tools mentioned thus far rely on Magic User Interface and so will all share a similar look and feel, rather than just a hodge podge of different styles. As for a Web browser, nothing has been finalised yet, but it looks like it will be Voyager in a new incarnation.

Everything is there to make TCP/IP on the Amiga into an easy 'anyone could do it'-type of operation rather than the arcane mess it was until recently.

Watch out for our review soon, but if you want more details now, then call Active software on 01325 352260 or email them at: sales@active2.demon.co.uk.



XP8 goes to Effigy

The creators of XP8 (reviewed in AF85), have been signed by Effigy Software on a three year exclusive publishing contract. WeatherMine Software, alias Matt Waters and Anthony Fenton Jones met up with us recently in Bath.

XP8 will be released by Effigy on August 30th and there will possibly be a CD-ROM version soon after. Ian Jenkins, Managing Director of Effigy said he was looking forward to a long and productive association with these talented newcomers.

All enquiries about XP8 should be addressed to:
Effigy Software, The Effigy Emporium, Station Yard, Station Road, Ruskington, Sleaford, Lincolnshire, NG34 9DG.

HiSoft raise a few IBrowse

The first fully-commercial release of IBrowse, currently the Amiga's most fully featured web browser, took place on 23 July.

Some of the features that make IBrowse a w-w-w well wicked web browser (hmmm - ed) are:

HTML 1, 2 and 3 support, cached pages (instant access to previously-viewed pages), DataType support allowing viewing of animations, movies, pictures etc., Web site hotlist, History list for each session, FTP plug-in for easy downloading, support for simple email from any web page with an email link, plain-English 64-page manual, superb user interface taking full advantage of Workbench 3, intuitive, drag-n-drop selection and, to top it all, almost everything is user-configurable.

IBrowse is now available from HiSoft for just £29.95 and requires 3Mb free memory, 3.5Mb hard disk space and Workbench 3 or later.

HiSoft are also launching a TCP/IP Internet connection for your Amiga that doesn't take a rocket scientist to configure and use.

Everybody who uses the Internet must communicate with it via a program, called a TCP/IP stack, that understands the protocol used on the net and all the complications that go with it.

Previously these programs have been a nightmare to set up on your Amiga but now Oregon Research and HiSoft have re-written the rules and produced an easy-to-use package which is fully configurable and comes with a comprehensive manual. All you have to do with TermiteTCP is call an Internet Service Provider (ISP) and obtain an account; then enter your ISP into TermiteTCP and click on Connect - it's that easy!

For the technically-minded, TermiteTCP supports PPP directly, includes GUI telnet and FTP clients (many more in the pipeline), provides programmer's information for third-party products, has a patch library to enable AmiTCP applications to work and supports high-speed serial cards (such as the Surf Squirrel). HiSoft are selling TermiteTCP for £59.95 or together with IBrowse and Net&Web for £89.95.

Finally, HiSoft Systems are delighted to announce the imminent release of the long-awaited Squirrel MPEG decoder (now known simply as the SMD-100). The SMD-100 is state-of-the-art electronics that allows you to use any compatible SCSI CD-ROM player to play VideoCDs and similar MPEG streams on your television or on a suitable monitor and listen through your hifi.

Offering extremely high quality playback of VideoCD 1.1, 2.0, Karaoke CD 1.0, OM-1 and CD-I Green Book CD-ROMs on any suitable display device (PAL or NTSC), the SMD-100 is perfect for home cinema viewing or stand-alone demonstration via custom-produced VideoCDs.

Simply connect a SCSI CD-ROM to one of the two SCSI connectors, plug your display into the 21-pin Euro/Scart connector, attach headphones/amplifier to the stereo phono outputs and then use the supplied infra-red remote control which offers play, stop, rewind/fast forward, pause, multi-speed slow motion, skip to next track and more. You'll be watching and listening to the highest quality MPEG movies around. Future developments will include software to allow MPEG streams to be played from your Amiga, fully genlocked to your Amiga.

The SMD100 is released, in limited quantity, on 23 August at an intial cost of £199.95 and just needs a SCSI CD-ROM, it doesn't even need your Amiga to be attached to it. All these products can be bought directly from HiSoft on 0500 223660

"It's 2am,. You're a 19 year-old bloke. It's Saturday night" - Andy Smith gives us his life story and an AB3D2 review in one serving

AB3D2 PAGE 40

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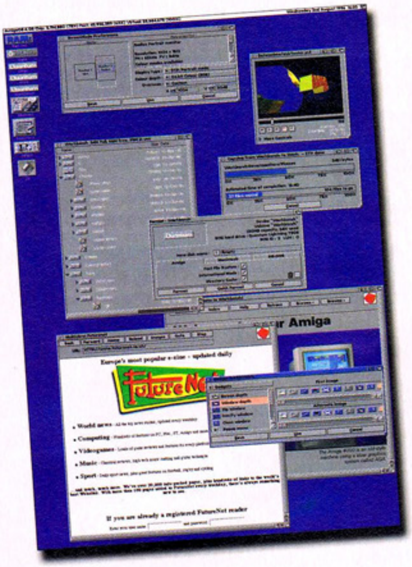
Amiga - pure geniOS



Ben Vost looks at the past, present and future of the Amiga's operating system - and compares it against its competitors

When people talked about operating systems my eyes used to glaze over before swiftly slamming shut. I didn't have the foggiest about what the operating system did, what it was for or who's job it was to look after it. All I cared about was that I could switch on my A500, put my Workbench 1.2 disk in the drive and boot up. I got used to all the requesters saying "Please insert volume blah in any drive", and responded to them without

Continued overleaf ➡



really understanding what they were there for or why the requester said any drive when I only had the one – was I missing something?

But once I started to use other computers and realised that some didn't even come with a mouse, I began to realise how lucky Amiga owners were, and once my Amiga set-up grew to include things like hard drives, accelerators and Kickstart 2, I came to understand that yes, I would need to know how to tune my startup-sequence and user-startup, and yes, I would need to do some housekeeping from time to time, sorting out the files that had grown in number from the hundreds to the thousands once I had removed the restriction of the floppy disk from the storage equation.

Before we start, I'd like to say that I am not an 'anorak', nor a 'trainspotter'. I use my computer for very many reasons and I never turn it on just to examine the relationship between the 'Dir' and 'List' shell commands (well, only occasionally). But understanding what is hidden in all those drawers on your hard drive is a sure fire way to increase your confidence in case anything does go horribly wrong. In an attempt to guide you through exactly the revelation I had, *Amiga Format* is proud to present a guide to operating systems, what they do, and what they *should* do

EVOLUTION

The Amiga's operating system has undergone many changes since its first appearance way back in 1985. Obviously influenced at first glance by the Xerox Parc project, as were all other early GUI-based operating systems, Workbench 1.0 and 1.1 were seen only by very few people. With the release of 1.2 came the A500 and the Amiga's star began to rise – big time.

Workbench 1.2 was an idiosyncratic little beastie. While everyone else's GUIs were almost uniformly black and white (oh, pardon me, the ST used a baize green for its background), the Amiga's four colour affair used bright blue and orange in addition to black and white which certainly stood out. At this time hard drives were a rarity, only available to the well-heeled, so everything had to be loaded from floppy. Because no-one had hard drives Commodore didn't even standardise hard drive access the way it is now with RDB (Rigid Disk Block), so every manufacturer method was unique and stopped anyone from sharing a hard drive with someone who didn't have exactly the same controller. To make matters worse, you couldn't autoboot from a hard drive under Kickstart 1.2, so you still needed a boot floppy.

Forgetting for the minute the obviously more colourful look to Workbench, there were a lot of other visible differences to the current version of our operating system. For instance, icons under Workbench 1.2 and 1.3 didn't have the grey box background that all Workbench 2 and 3 icons do, the menus were laid out very differently and the Prefs drawer contained only five icons instead of the 15 or so that currently grace Workbench 3.1.

Workbench and Kickstart 1.3 gave the Amiga autobooting for hard drives

every manufacturer method was unique and stopped anyone from sharing a drive with a different controller

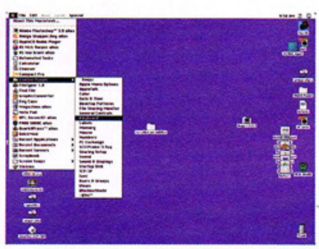
WHAT EXACTLY IS AN OPERATING SYSTEM?

An operating system is the lowest layer above the hardware in a computer. If you think of your Amiga, as a whole, as something akin to a sherry trifle, then the hardware itself is the jelly (I guess that the bits of fruit and sponge could represent peripherals - "Oh yes, I have an eight speed Boudoir biscuit in my machine you know..."), then the operating system is the custard on top of the jelly and finally on top of that is the whipped cream - your application software, things like Wordworth, Photogenics or even little commodities. In this feature we're going to cheat a bit and refer to Workbench as your operating system. This isn't strictly accurate, the Amiga's operating system is actually called Intuition and it's a layer just underneath Workbench, but for the sake of argument and simplicity we'll be referring to Workbench, Windows95 and the Macintosh's Finder as being their respective operating systems, after all, they are the aspects of the operating system that most people have access to.

The operating system of a computer is (usually) responsible for screen display, device management (i.e.. looking after disk access, mouse movement, printing, etc.) and many other things that you don't want to have to pay attention to. Some of the Amiga's operating system is actually buried in the Kickstart ROM – some CLI commands, a library or two, that sort of thing, which means that they are readily available at very short notice. This is a feature that the Amiga and Mac share, but the PC doesn't, which probably accounts for the long boot times suffered by Windows users. Still, plenty of time to get bitchy about other people's operating systems later...

WHAT THE OTHER HALF SEES – A MAC BOOTING UP







As a Mac boots up the progress meter moves along and 'extension' icons (the Mac's equivalent of commodities, only not as versatile) appear across the bottom of the screen. The Apple menu is available from any application – here we are accessing the Mac's equivalent of Preferences.

The Mac's Finder (Apple's answer to Workbench) does have a built-in copy progress bar, unlike the Amiga.

THE HISTORY OF THE AMIGA







The A1000 was the first machine to become commercially available and stunned industry-types at the time, but the A500 was the machine that every schollboy wanted. The Batman pack was the Amiga's most popular ever bundle, selling huge numbers. The A2000 (which was later rebadged as the A1500 with Kickstart 2) was the first

(and the fast file system), the Shell in addition to the CLI (things like history, aliases and better cursor control are all Shell features), better printing, more fonts and utilities including the 'invaluable' pointer clock.

But it was Kickstart and Workbench 2 that really set the ball rolling on the innovative nature of the Amiga's operating system. A whole new look to the Workbench interface – stylish greys and blues, AppIcons, AppWindows, Public screens, proper preferences (though still not fully up to scratch for printing), ARexx as standard and the ability to pretty much totally customise the look of your individual Workbench using different fonts, background patterns, and so on.

A lot changed under the hood too. Most of the original 1.2 and 1.3 commands and libraries had been written using BCPL, a forerunner to C, but Workbench 2 was mainly C-based. FastFileSystem got moved to Kickstart so that you could now boot from FFS disks, and a lot else was changed.

THE AGA GENERATION

When AGA was developed Workbench also had to be upgraded to take account of the new graphical standards that were gained through the latest chipset. Previously, Workbench and Workbench-type screens were restricted in the number of colours they could display, after all there was no need at the time to write the software to handle non-existent colour levels. But AGA and RTG graphics cards changed all that and Workbench and Kickstart 3 were born. These introduced 8-bit colour Workbench screens and new features like datatypes (which could be infinitely expanded to cater for any new file types created), proper PostScript output support, localisation and new expandable gadget classes which would allow programmers to simply make use of standard system gadgets rather than having to create their own from scratch every time.

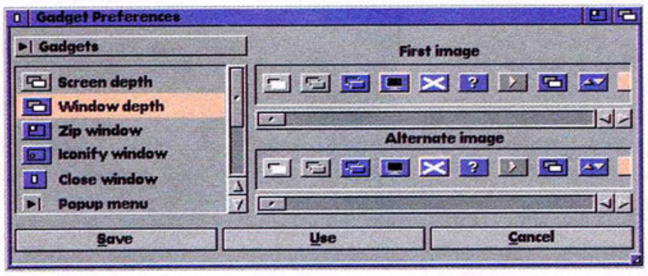
So you might think we're doing pretty well when it comes to operating system functionality, what with multi-tasking, shared libraries, gadget classes, datatypes and so on. But the fact of the matter is that no matter how innovative these features seem, they are no longer innovative, they are, in parts, flawed and they aren't implemented fully so that everyone uses them.

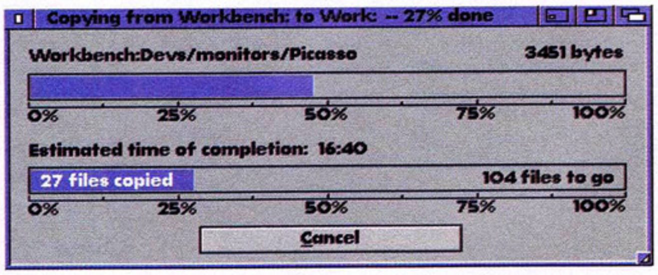
For instance, datatypes would appear to be a real boon. Imagine never having to write another bit of code to load an IFF picture, sound or animation. Let the system do the work for you, etc. All very well apart from the fact that datatypes have proven in use to be slow, restricted to 8-bit colour for pictures and use Chip memory, even if it is unnecessary.

But if we've got it bad, how about the other operating systems ? Well, from a beginners' point of view, the Macintosh's System 7.x finder is very nice to use. There's practically nothing you have to do to optimise your system, in fact, that's part of the problem, there is nothing you *can* do to optimise your system, whether you want to or not. The Mac has an operating system that is like a flash bike with training wheels – ones you can't remove. It babies you through every decision slowing down the pace at which you can work. Having said that, it also has some absolutely superb features such as built-in networking

Continued overleaf ➡

Datatypes have proven to be slow, restricted to 8-bit colour for pictures and use too much Chip memory



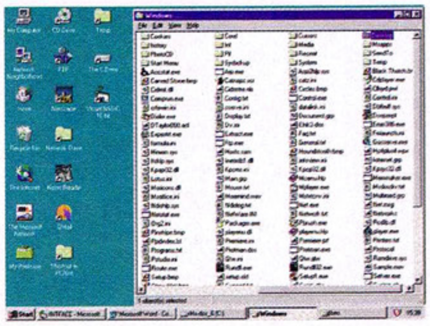


Workbench would be so much nicer to use with a copy progress bar, and the ability to change what gadgets look like would be in keeping with the Amiga's flexibility.

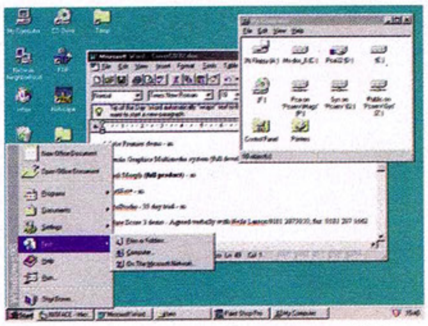
WHAT THE OTHER HALF SEES – A PC BOOTING UP



Hold onto your hats – here we go. This PC has the add-on Plus Pack, which takes up even more space.



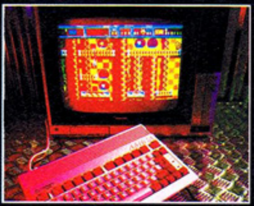
The Windows' method of displaying files is not quite as efficient or as friendly as the Mac's.



But it also has a built-in menu system which is always available to launch new programs.

THE HISTORY OF THE AMIGA – PART TWO





Amiga with Zorro slots. It was incredibly expensive at over £1000 for a machine with no hard drive and only 1Mb RAM. The 3000 followed in 1990 at an initial cost of £3000 which soon dropped down. Commodore also launched the A500Plus around this time – a Workbench 2 based machine with 1Mb chip RAM, which was swiftly superseded by the A600 – the bane of the Amiga. This machine was, and remains, practically unexpandable,

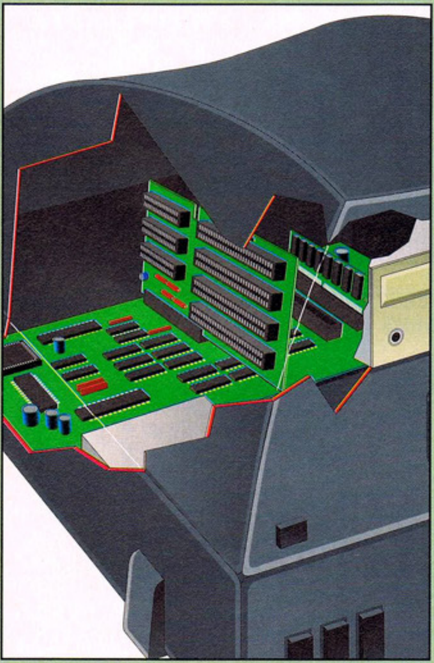
for the Mac and PC alike, virtual memory is standard and invisible – you'll rarely get an out of memory error

from day one, the way it shows files listed by name (more on which later), the ability to have multiple monitors on one machine and treat them like one big monitor, system-wide PostScript support, graphics libraries for animation, 3D, vector and bitmap drawing and much more. If the Amiga were to disappear off the face of the earth today, I think more people would be inclined to use a Mac than a PC. The system works very well and although much is said about the fact that the Mac doesn't multi-task, this is not 100% accurate. While it is true that you cannot format four disks at once while playing an *OctaMED* tune and standing on your head, neither has the Amiga any software that will allow the user to interrupt a redraw in order to change some element of a picture in the same way that *Photoshop* can. On a Mac, you don't see how much memory you have at the top of the screen like you do on the Amiga, because for the Mac and PC alike, virtual memory is standard and invisible. Sure, you might notice your hard drive groaning a bit under the strain and certain operations slowing down, but you'll rarely get an out of memory error (or worse, a crash because you've run out of RAM).

Windows95, on the other hand, is a different kettle of fish. While it installs without a problem (usually), taking about 45 minutes from a CD-ROM, getting the best out of it is still a return in parts to the bad old days of MS-DOS. Although Windows95 is supposed to be an all new graphical OS, it isn't really and shares more in common with Windows3.1 than Microsoft would care to admit. Still, that being said, it isn't many OSes that you receive bundled with games, internet connectivity, word processing, comms and paint programs. OK they might not be very good, but there they are, ready to be used. You, the consumer, don't have to get off your behind and go and buy a shed load of software just to get going. On the Amiga, if we want to back up our machines, recover deleted files and optimise our hard drives, we really need to go out and spend some forty quid on a suite of tools for the job. Windows95 users get it all thrown in for free. Of course, there is an argument that says giving all this stuff away free a) fills up people's hard drives with stuff they might never use and b) means that these same people might never go out and spend another penny on their machine (no, not that sort of penny). All these freebies go some way to account for the massive 100Mb+ that a complete Windows95 installation can take. And that doesn't include any of your applications. It's just a good job hard drive prices are falling.

FUTURE WORKBENCH

So what can we do about the Amiga's shortfalls? Well, Viscorp have said that they want to hear from Amiga users the world over to find out exactly what they want from the next generation of Workbench. So let's cruise the highways



WHAT WILL BE ON THE INSIDE OF OUR BRAND NEW AMIGA?

We've already loosely discussed the way that the hardware in the new Amiga should be configured. We all want the capability to add more RAM than 16Mb (the current absolute maximum for any standard Amiga without adding peripherals), we would all like to be able to upgrade our processor easily and add an FPU if necessary. It would be nice to think that any new Amigas will come with hard drives (SCSI preferably), CD-ROM drives and high density floppy drives as standard.

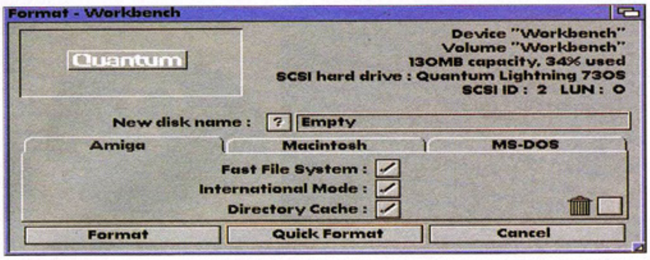
Let's start with the easy stuff. Assuming, for the moment, that we are solely talking about any new machine being a big box Amiga, RAM limitations should be one of the first things attacked, after all, the chips in Motorola's current range can address more than four gigabytes of RAM.

SIMM sockets should be able to take a variety of 72-pin SIMMs for maximum flexibility, there should be a minimum of two on the motherboard, but preferably four.

If we take the base CPU as an 040, then we have no need of an FPU and easy replacement with a 68060 chip. However, should the machine be powered by an 030 to start with, then some sort of CPU slot will be called for. If the way memory is handled is done well enough, then plug-in accelerators will only need to provide additional computing power, not memory expansion, thus bringing down the price of such expansions.

One thing that remains important is the fact that any processor used to power a new Amiga should have an MMU allowing for virtual memory as standard (not to mention emulation of other systems). This, in addition to the hard drive as standard, will allow people who can't afford to be able to buy more memory to still use memory-intensive applications, albeit at a slower rate.

8-bit sound sampling chips cost next to nothing so changing the current audio outputs on the machine to a 3.5" minijack and adding a similar minijack input to such a sampler would increase the powers of the machine enormously, especially for Internet Phone and speech recognition programs. Video digitising is more expensive, but should be available as an option.



Amiga users shouldn't have to mess around when formatting disks, since it is one thing that Amiga's do so well. This new format window will allow for formatting any type of filing system supported and offers a choice of standard names through the question mark button. Note the extra hard drive info.

and by-ways of our operating system and see if there's anything we can improve. This is just my opinion, if you have your own ideas of what you'd like to see, there's nothing Amiga Format would like better than to encourage you to write into us with your ideas. You never know, maybe we'll offer a prize.

These suggestions are all made assuming no major paradigm shift occurs in the way Workbench works. The graphics I created to illustrate the article still use the basic Workbench colours, plus the four MagicWB colours that everyone seems to like. I'm sure that changes will be made that are far more drastic than those I have suggested – have a look at the mock-ups other Amiga owners have made on the CD (in the "In_the_Mag/FutureWB" directory) for an idea of what some users would like to see.

THE HARDWARE

Before we get onto cosmetic items like the looks of Workbench, let's start with a side issue, that of the hardware. Without decent hardware, there's little point discussing new features for a Workbench that will require more processing horsepower. First of all, assuming that we will be sticking with the 68000 series for the moment, let's see a 68040 as the entry level processor. It would be fine at 25MHz, even an EC version would do if budgets required it, but the advantage of an '040 as the base level processor is that it can be simply removed from the motherboard and replaced with an '060, provided, of course, that the motherboard was built to be able to handle an '060. Secondly, let's have a return to SCSI as a standard. IDE may be cheap, but it's limiting and causes confusion if SCSI devices already exist. Thirdly, an updated Gary (and whatever other chips need updating) in order to provide for a full speed high density floppy disk drive (a Zip drive internally might be a nice idea, but is far to expensive in practice). Lastly, and most ambitiously, a new graphics chip set. My ideal would be to have four sockets on the motherboard. The first comes filled when you buy the machine and the chip filling it is capable of giving you 8-bit graphics. Adding a second chip would give you 16-bit graphics (65,536 colours on screen), a third to give you 24-bit graphics and the last socket filled giving you 32-bit graphics. Obviously, this would require building a new graphics chipset, a time consuming task in its own right, and then changing the way the system software works in order to take advantage of these chips in any combination. This software should be able to provide both chunky and bitplane graphics (depending on which is more suitable at the time) to high resolution (i.e.. 1024x768, etc.), and offer system-wide dithering of higher colour images, so that there is no need for different versions of graphics for different levels of power. All these suggestions are made with the tacit inclusion of things like SIMM sockets able to take a reasonable amount of RAM, 64Mb say, a SCSI hard drive as standard and a hardware flicker fixer (should it be needed).

OK. Now it's time to look at amendments to Workbench to make it work better and more efficiently. The first thing that really does need to be done is to give Workbench multitasking. I know it sounds silly to say, but if you don't believe that Workbench needs multitasking, try copying a whole bunch of files from one place to another using Workbench and see how much else you can do at the same time. While we're on copying, wouldn't it be nice to have a copy (and delete) progress bar, much like you do in DOpus?

Let's also get rid of bitmap, Compugraphic, Intellifont, TrueType, DMF, Postscript and NimbusQ fonts and just stick with one standard: PostScript, say. No more worries that a certain font won't be available to you in one application or another. The only need for the original Amiga bitmap font format would be for colourfonts, but even they could be replaced by just using 'clipfonts', although this wouldn't satisfy your average videographer.

Going back to hardware for just a second, let's make sure that every Amiga comes with a CD-ROM drive as standard, in addition to a hard drive, and that it can be booted from. I would like to see a really good CD player as part of Workbench, and I think the

Continued overleaf ➡

MY TOP TEN UTILITIES TO MAKE WORKBENCH MORE LIKE IT OUGHT TO BE:

These are arranged in no particular order and all are available on the CD in the "In_the_Mag/FutureWB/Top_Ten/" directory.

Magic File Requester
Everything a file requester should be. It offers file renaming and deletion, directory creation, filename completion and so much more it's silly.

ARQ
ARQ should also be built into Workbench as standard. If not, then the idea that you can hit return or Esc to activate buttons in requesters certainly should be.

CycleToMenu
Whoever's idea cycle gadgets were should be shot. Pop up menus make much more sense.

MagicMenu
The ability to have your menus anywhere on the screen is invaluable, especially if you use a graphics card and taking your mouse for a trip up to the top of the screen is akin to running a marathon.

ToolManager/ToolsDaemon
These two products add new menus and menu items to Workbench. This saves you from having to scout out the things you need to use from the depths of your hard disk.

SwazInfo
Icon information the way it ought to be presented, SwazInfo gives you drag and drop, default icons, easy tooltype toggling and more.

TBClock
A clock in the title bar on every screen. Damn handy.

KingCon
If only KingCon's abilities were built into Kickstart. I'm always hitting the tab key when I boot with no startup-sequence.

PowerSnap
Copying from the user interface directly into the system clipboard. It doesn't work with everything, but it's still very useful.

MagicFrames
Serious Amiga users tend to use their machines in screenmodes with a (near) 1:1 aspect ratio. Magic Frames stops the borders of buttons and other gadgets from trying to double up the width of the border for these gadgets.

HISTORY OF THE AMIGA PART TWO









The A1200 and A4000 were the first machines to use the all-new singing and dancing AGA chipset (renamed from AA because of the association with an organisation that deals with people with a drink problem), and the CD32 was another stab by Commodore at the console market which pretty much failed, in spite of some excellent ideas. So what next? Now that the Walker is out of the picture, what will be the next Amiga?

Let's have a file requester that offers the option to create directories, delete files and so on

ability to view PhotoCD images should also be incorporated into the system. Let's put Workbench onto CD and distribute it that way. The benefits are manyfold. Firstly, there will be no disk swapping when installing, secondly, it will be cheaper for the Amiga's owners to press CDs than multi-disk sets – CDs are less prone to damage than floppies and take less space. Having Workbench on CD would mean that not only could you put the lowest level of software on there, but also developer information, networking utilities, specialised tools for video or DTP, even shareware titles, etc. There would also be ample room for full on-line help, something that the Amiga sorely lacks.

HELP ME IF YOU CAN

Let's talk about on-line help. While AmigaGuide was great when it first came out in 1989, it is definitely looking dated these days. I would like to see a freely distributable program for creating on-line help files created by the Amiga's owners that would take text and pictures, even animations and sound, and compile them into a single executable file. The user would be able to choose whether to bind all, some or none of the components that go to make up the file, but provision should be made to lock fonts into the file if necessary so as to give the creator full freedom to make whatever he or she wants out of this help file.

This way, Multiview could become the basis for whole multimedia encyclopaedias rather than just the glorified text viewer it is at the moment. Let's give some of these capabilities to Installer too, while we're about it. They both need an easier way of being created – get away from the tough, low-level scripting if at all possible.

Now for icons. Most current operating systems have a system standard 256 colour palette. This covers a fair amount of different shades of colours without the overhead of having to rejig the palette any time something new comes along. Perhaps it would be a good idea to implement this for Workbench so that we can do away with having to force the first eight colours of the Workbench palette. The only problem with having reeeaally colourful icons is the fact that they may become larger than the programs they are representing, but surely the solution is to offer people the ability to configure icons the way they want to? Also, having to maintain a RAM disk icon through the user-startup and subterfuge is silly. Let's have a 'def_ram.info' in envarc: that gets updated when you snapshot the ram disk or change its icon.

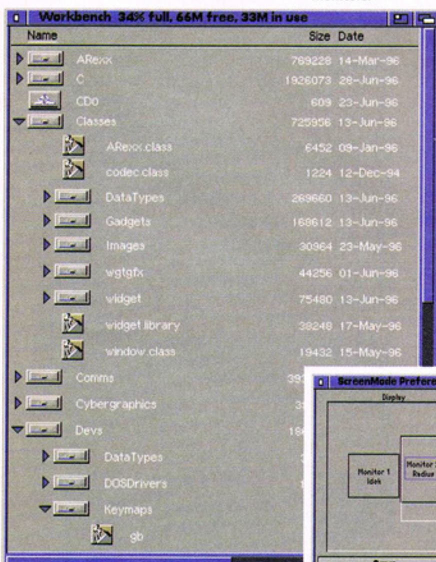
SORT IT OUT

File handling is next. Firstly, file notification should be system-wide, this means that whenever something gets copied onto, deleted from or moved around your hard drive, the Amiga knows about it. Let's have a file requester that offers the option to create directories, delete files and so on. Let's have MS-DOS disks (and Mac disks) treated transparently so that the user doesn't have to guess, and use the Mac's method of shortening file names for 8.3 DOS disks so that if the PC disk happens to appear on an Amiga or Mac, the file names will be restored to their full length.

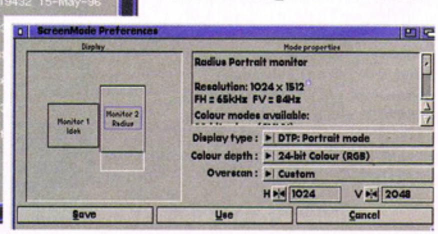
On the subject of how files appear on Workbench, let's steal from the Mac again and make use of their excellent view by name window. As you can see in this Amiga-tised version, you can simply click on the category at the top of the window to change the sorting method, you can open subdirectories in the same window by clicking on the arrow gadget (these subdirectories can also be double clicked on and this will open them up in their own window). The directory sizes can be calculated using 'spare' processor time and even cached to disk for further reference.

There are so many more changes that could be added to Workbench that we could fill at least twice as many pages as we have – we haven't even touched on multi-user networking support or built in TCP/IP software, but the feature has to end somewhere. But even these cosmetic changes would improve the utility of Workbench in my opinion. All those commodities you currently have to run in your WBStartup drawer wouldn't be necessary if Workbench were updated. Send us in your ideas for improvements to Workbench and the Amiga using the survey on the next two pages (you can use extra paper - or even better, send us mock-up IFF pictures we can print in the mag if you like), but remember, unless you want to pay five squillion quid for your dream Amiga, keep your ideas affordable.

Below: An Amiga version of the Mac's 'View by name' window.



Bottom: In the future, perhaps the Amiga will be able to use multiple monitors.



It's time for YOU to make YOUR presence felt, as you answer questions on such diverse topics as "Which was the best cover?" and "Do you read Fortean Times?"

AboutYour Amiga

Which of the following do you own

- A500
- A500 Plus
- A600
- CD32
- A1200
- A1500/A2000
- A3000
- A4000

What version of Workbench are you using?

- 1.2
- 1.3
- 2.04
- 3.0
- 3.1

Do you have an accelerator card? If so, which processor does it use:

- 68020
- 68030
- 68040
- 68060

Do you have an FPU?

- Yes
- No

How much RAM do you have?

- 1Mb
- 2Mb
- 4Mb
- 6Mb
- 8Mb+

What size is your hard disk?

- Don't have one
- <100mb
- 100 - 400 Mb
- 400 -800 Mb
- 800Mb - 1,2 Gb
- > 1.2Gb

Which of the following do you you

	already own	intend to buy:
2nd floppy drive		
HD floppy drive		
mono printer		
colour printer		
modem (14,4k +)		
modem (≤ 9600)		
Sound sampler		
digitiser		
monitor		

What sort of SCSI interface do you have?

- None
- Squirrel/Surf Squirrel
- Dataflyer
- SCSI on accelerator card
- Other

What sort of CD drive do you have?

- None
- A570
- CDTV
- CD32
- Other Single speed
- Other Double speed
- Other Quad speed

What resolution do you run Workbench in?

- Low res
- HiRes
- HiRes Lace
- A higher resolution

What do you most often use your Amiga for?

- Games
- Animation
- Video
- 2D Graphics
- 3D Graphics
- DTP
- Music
- Word Processing
- Business
- Programming
- Comms/Internet
- All of the above
- Other

What other computers do you

	own?	intend to buy
PC		
Apple Macintosh		
Acorn Archimedes		
SNES		
MegaDrive		
Playstation		
Saturn		
N64		

About Amiga Format

How often do you buy AF?

- Almost never
- About one in three issues
- About every other issue
- Nearly every issue
- Every issue
- I'm a subscriber

How many people read your copy?

- I wouldn't let anyone else near it
- Only my best mate
- Quite a lot of people (i.e. five or more)
- Haha. I spend all month typing it out and illegally transmitting it to the whole universe on the SW band

What factor is most important to you buying the magazine?

- Price
- Number of pages
- Interesting feature
- Coverdisks/CD
- Interesting cover

Which of these covers do you like the best? (Picture Round)

- AF75
- AF77
- AF81
- AF82
- AF84
- AF87
- AF88

How much of the magazine do you read?

- All of it
- Nearly all of it
- About half of it
- Only a dozen pages
- The coverdisk page

Tick the words which you think best describe AF

Amusing	Cheap
Assertive	Arrogant
Baffling	Friendly
Intelligent	Boring
Inspirational	Active
Relaxed	Rubbish

How "technical" do you think AF is?

- Too technical by far
- I get lost sometimes
- It's just right
- It's a little simplistic
- 4C414D45525321

Which of the following would you like to see more of?

- Amiganet
- Arexx
- Workbench
- Features
- Reviews
- Real3d
- Letters
- Gamebusters
- Previews
- Letters

Which of the following would you like

Continued overleaf ➡

to see less of?

- Amiganet
- Arexx
- Workbench
- Features
- Reviews
- Real3d
- Letters
- Gamebusters
- Previews
- Letters

What would you rather see on Amiga Format's coverdisks:

- More complete old programs
- More demos of new programs
- More new shareware titles

About other mags

Which other Amiga mags do you read?

- Amiga Computing
- The One
- Amiga Power
- CU Amiga
- AUI
- Other...

Which Amiga mag do you think is best?

- Amiga Computing
- The One
- Amiga Power
- CU Amiga
- AUI
- Other...

What is the major reason for your choice above?

- It's cheap
- It offers the best value
- It has better disks/CD
- Better writing
- More about things that interest me

What non-Amiga mags do you read?

- Q
- Select
- Bike
- Arcane
- Sfx
- Premiere
- Face
- 2000AD
- Empire
- New Scientist
- Top gear
- Fortean Times
- Wired
- Private Eye

About You

How old are you ?

....

Are you, as we suspect, a bloke?

Yes ☐ No ☐

Which of the following best describes your job?

- Student
- Professional job hunter
- Unskilled labour
- Skilled labour
- Professional
- Rich layabout (we promise not to send begging letters)

Do you use your Amiga for work?

Yes ☐ No ☐

How much money do you earn a year?

- sadly, not very much
- £5000-£10000
- £10000-£15000
- £15000-£20000
- £20000-£30000
- £30000-£40000
- £40000+

How much do you spend on your Amiga per month?

- less than £15
- £15-£25
- £25-£40
- £40-£60
- £60-£80
- £80-£100
- £100+

Improving the Amiga

What do you want to see most of all in a new Amiga:

- Better graphics
- Better Sound
- Better functionality

What do you think is more important:

- Having a hard drive as standard
- A faster processor
- More base memory

How much would you be willing to pay for a new "big box" Amiga with a hard drive, CD-ROM drive and 6MB RAM:

- I wouldn't want one
- - £500
- £500-£750
- £750-1000
- £1000 +

Do you think the Amiga is in safe hands with VIScorp?

Yes ☐ No ☐

Special Bonus Ocean Question

Which best describes your attitude to TFX, Ocean's amazing flight sim that requires 4Mb RAm and an '030 at least?

- Never heard of it
- I would love to play it, but my machine isn't up to it
- My machine is up to it, but I'm not interested
- Yes, I want it, why don't the rascals release it now!

TOP PRIZES TO BE WON

We shouldn't really have to bribe you, but one lucky respondant to our survey will receive £200 worth of top quality software. In order to make sure you get the software you want, we will be contacting the winner to sort out what kind of software would best suit them. A winner will be drawn on 31st October (spooky) to allow time for overseas entries.

Enter here any other comments you have about Amiga Format

Enter here any other comments you have about the Amiga

Name ....

Address ....

....

....

Telephone: ....

Email: ....

send your completed form to : AF Survey '96, 30 Monmouth Street, Bath, BA1 6PS



2.88 MIPS OF SPEED

MAGNUM RAM8
A1200 8MB RAM Accelerator

LIMITED OFFER PRICES

	No FPU	33MHz FPU
0MB	£49.99	£89.99
2MB	£89.99	£129.99
4MB	£119.99	£159.99
8MB	£199.99	£239.99

Speed increase of 2.3 times - 2.88mips ♦ Available with 0, 2, 4 or 8MB of 32-bit RAM installed ♦ Uses standard 72-pin SIMMs ♦ Optional PLCC type FPU (Floating Point Unit) ♦ Battery backed clock/calender ♦ Finger cutout to help installation ♦ 0-4MB - PCMCIA compatible (for use with Overdrive, Squirrel etc.) ♦ Zero waite state design.

FREE OPUS 4.12 worth £50

33MHz FPU

An FPU dramatically increases the speed of mathematical calculations (by up to 127 times!) and we would recommend it for users of graphical applications such as Image FX, Lightwave, Vista Pro, Imagine etc. Our FPU pack comes with the timing crystal and is compatible with most A1200 RAM/Processor accelerators such as our Apollo/Magnum design, Hawk, Blizzard and Viper. If bought independent of our board the price is

£44.99 (or £40 with an A1200 board)



7.12 MIPS OF SPEED

MAGNUM 030/40
A1200 40MHz '030 Processor Accelerator

FREE OPUS 4.12 worth £50

LIMITED OFFER PRICES

	No FPU	33MHz FPU
0MB	£139.99	£179.99
2MB	£179.99	£219.99
4MB	£209.99	£249.99
8MB	£289.99	£329.99
16MB	£399.99	£439.99

Speed increase of over 5.6 times - 7.12mips ♦ 680EC30 processor running at 40MHz (NEW 40MHz chip - NOT overclocked) ♦ Up to 128MB of RAM can be added ♦ Available with 0, 2, 4, 8 or 16MB of 32-bit RAM installed (call for higher SIMM sizes) ♦ Kickstart ReMapping ♦ Optional SCSI-II interface ♦ Can accommodate a 72-pin industry standard SIMM ♦ Optional PLCC type FPU (Floating Point Unit) ♦ Battery backed clock/calender ♦ PCMCIA compatible so you can still use products such as OverDrive HD or CD/Zappo CD-ROM or Squirrel ♦ Zero waite state design.

SCSI-II Option

The Magnum '030/40 can also be expanded via our warranty safe SCSI-II interface to support up to 6 SCSI devices with direct access to the '030 processor and memory for ultra-fast access. Our controller is also compatible with the Viper-II card. £79.99

PRO SYSTEM
Complete A1200 Hard Disk Kits

FREE OPUS 4.12 worth £50 — **3 YEAR WARRANTY** — NEW

Yes, at long last, a professional way to install a high capacity hard disk without cardboard & glue! Our packs offer you our exclusive and copyrighted Brack-It 1200 Fitting System & a choice of high speed/low cost hard disks.

Brack-It 1200 Fitting System

Designed to accommodate the newer drives on the market offering high capacity & speed at great prices. Our pack includes robust steel fitting brackets, all cables for power and data, instructions & 7 disks FULL of HOT software such as Directory Opus 4.12 (worth £50), MUI 3, MCP, Galaga AGA, Virus Checker, Mods, ReOrg, ABackup and MUCH MORE. All software can be installed with our custom click 'n' go system. All drives are pre-installed with the system software & above disks - unlike others we provide the disks just in case!

540MB	£179.99
850MB	£189.99
1.0GB	£199.99
1.28GB	£219.99

Need the drive installed by a professional engineer? Our collection, fitting and delivery service is just £20 - call for more details

Prices include the Brack-It System (normally £35) & UK Delivery

ENTERPRISE
Desktop Workstations for all Amigas

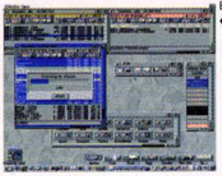


Single Workstation	507 x 95 x 315mm	£29.99
Double Workstation	507 x 155 x 315mm	£34.99
Wide Workstation	665 x 95 x 315mm	£34.99

All sizes are W x H x D

DIRECTORY OPUS 5

AMIGA GOLD FORMAT



♦ Redesigned and rewritten from ground up. Much faster more efficient and many new revolutionary features. ♦ New interface with more meaningful control and useful power. ♦ Amiga Style Guide compliant ensures clearer communication of information and greater control. ♦ Unlimited number of fully independent file display windows and button banks. Buttons can be defined from text or graphics ♦ Multiple configuration editors - which can be used whilst performing other tasks! ♦ Internal multitasking allowing you to perform multiple operations simultaneously. ♦ AmigaGuide on-line help ♦ Advanced file type recognition system including OS3.x Datatype support ♦ Extensive 'Drag 'n' Drop' throughout the program ♦ Advanced ARexx support ♦ Can even replace & enhance Workbench!

LIMITED OFFER PRICE — Workbench 2+ & Hard Disk Required — ~~£59.99~~ £29.99

QUARTERBACK DISK SUITE
Quarterback 6.1 & Quarterback Tools Deluxe

NEW

At last - the classic QuarterBack 6.1 and QuarterBack Tools Deluxe are back on sale. Considered by most as THE disk backup and disk recovery programs we have available, for a limited period, the two packages combined at an unbelievable price (normally £79.99). Disk backup and disk recovery/optimisation are two key tasks that just shouldn't be left to inferior PD alternatives. Get the BEST - get the QuarterBack Disk Suite.

LAUNCH PRICE £34.99

PC TASK 4.0
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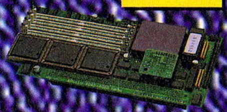
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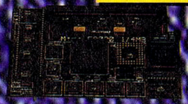
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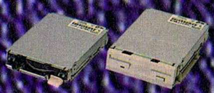
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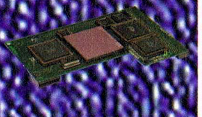


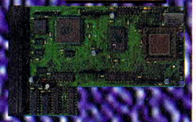






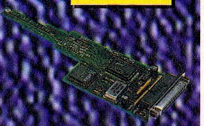












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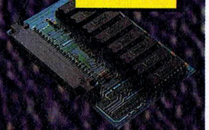
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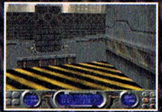
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Unix for Free

Simon N Goodwin explains how to run the big boys' operating system on your Amiga.



The system logo snapped from the NetBSD Home Page.

One of the great strengths of the Amiga is its ability to emulate other computer systems. If you want to run a really wide range of software, for computers large and small, the Amiga is the most flexible platform you can get, and it keeps getting better.

Commercial emulators like *Emplant, PC Task* and *ShapeShifter* work well at converting the Amiga into a mainstream business machine, but there is another important class of 'serious' computer besides Mac and PC. These are the 'Unix boxes', workstations that run professional Computer Aided Design and graphics applications, university time-sharing systems, telephone exchanges, big business databases, BT's WirePlay service, and most of the Internet.

NetBSD is the best implementation of Unix for modern Amigas, and it's free. In fact NetBSD is not an emulator, but a replacement operating system. The 'Net' in the name refers to two things – the fact that this is a networking, multi-user, multi-tasking system and the way that it was developed, by a group of enthusiasts communicating over the Internet.

BSD stands for Berkley Standard Distribution, after the US university where it was born.

UNIX STORY

Unix has been around longer than microcomputers – it was originally a minicomputer system invented by Dennis Richie and Ken Thompson at Bell Labs, part of US telecommunications giant AT&T, in the early seventies. Unix was the birthplace of the 'C' programming language – almost the entire system is written in C – and this makes it relatively easy to convert between hardware platforms.

C is derived from BCPL, the UK-developed language originally used to write Amigados. Most of Amigados was translated from BCPL to C for the release of Amiga Workbench 2, and many developers use C in preference to assembly language, the Amiga's native tongue. But most of the routines in the Kickstart ROM are written in assembly code, which saves space and time but makes it relatively hard to convert the Amiga system to run on other processors.

STRONG AND FLEXIBLE

Unix is extremely powerful and very cleverly designed. The price you pay for this versatility is that the system is big and it takes a long while to learn your way around.

Unix systems have a mouse-based graphical interface, like the Amiga's Workbench and Intuition. The Unix equivalent is X Windows, a very powerful and fairly friendly system that was developed at MIT years before anyone had a computer powerful enough to run it. NetBSD can run X, and it's much easier to use it that way rather than from the shell.

The standard Amiga graphics driver is monochrome, although ECS and AGA colour could be implemented; there are already colour drivers for most Zorro display cards. Ideally you'll have a three button mouse but a standard Amiga mouse is usable by pressing both buttons at once to emulate the missing switch.

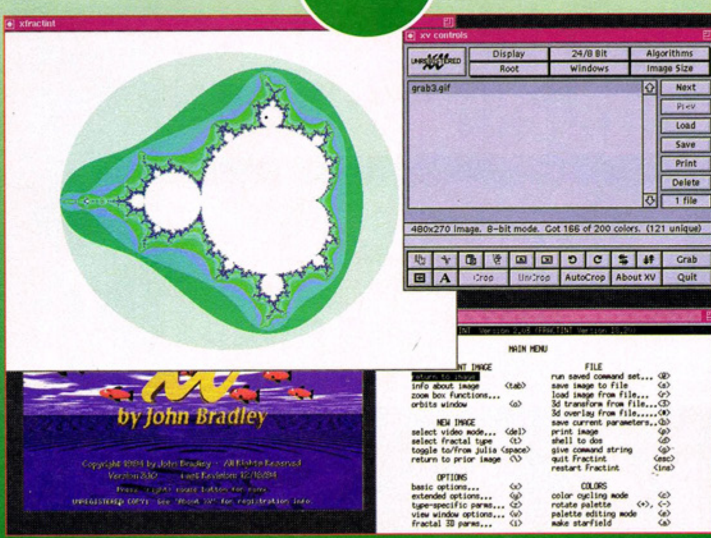
SOFTWARE

Today there are two 'free' versions of Unix for the Amiga: NetBSD and Linux. Linux is the most popular version for IBM clones but the Motorola versions, principally for Amiga and Atari, lag a long way behind

NetBSD runs on about a dozen processors – don't confuse it with FreeBSD or BSD386, which are custom BSD Unix versions for Intel-based computers.

Unix is a mainstay of education and some of the best freely-distributable software in the world has been developed on and for Unix systems, most notably by the Free Software Foundation, who believe that if they're going to spend their lives writing the best software around, they want as many people as possible to use it.

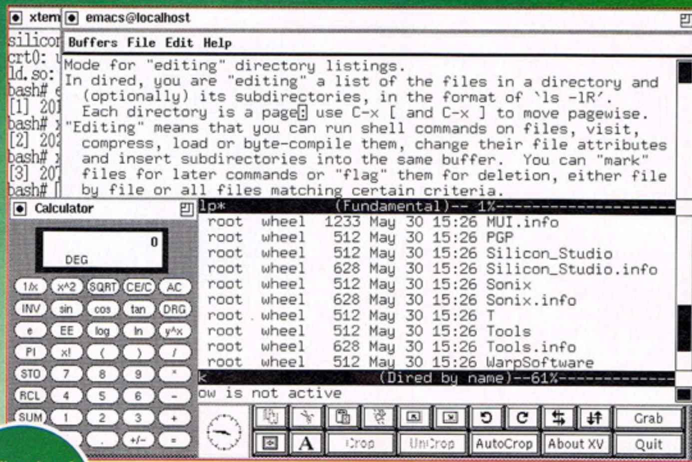
The generic name for their project is Gnu, which stands, recursively, for



Source for programs like *Xfractinct, Bash* and *XV* is widely available on the Internet.

Gnu's Not Unix, symbolising that it's new, and old, and whacky, all at the same time. Gnu programs always come with complete C source code and replace standard AT&T tools with all-singing, all-dancing versions, often with silly names. There's a compiler to generate new compilers, in C of course, called *Bison*, named after the Bell Labs program YACC (Yet Another Compiler Compiler). *Oleo* is the Gnu X spreadsheet. Gnu's implementation of the Postscript graphics language is called *Ghostscript*, and drives almost any printer, and screen display too. *Emacs* is the ultimate text editor which lets you assign any action to any key or combination.

Many GNU projects have been converted to run on the Amiga's own operating system but the latest and best versions expect to run on a real Unix system, with access to the full set of tools and accessories, and the quality of these Amiga conversions tends to vary wildly depending on the skills of the converter and the number of other people who take an interest.



A full version of the *Emacs* editor with *Xcalc* and an *Xterm*.

NECESSARY HARDWARE

Unix was developed on large computers and needs substantial hardware resources – either the old 68851 on some 68020 systems, the full 68030 (not the EC version in the first A4000 and some A1200 accelerators) or, preferably, a 68040.

Even a cut-down system needs at least 64Mb of dedicated hard disk space – two or three times that to be comfortable – and a fast drive. It's much easier to install the system from CD, Ethernet, SLIP or tape, rather than lots of floppies. You can use command-line programs with just 4Mbs of fast memory, but *X Windows* is unbearably slow in any less than 8Mb.

The system supports all the standard Amiga ports, including serial, parallel, floppy, mouse and IDE disks, ECS and AGA displays and most SCSI controllers for hard disk, CD-ROM and tape streamer support. Ethernet works via Hydra Amiganet, Golden Gate and Commodore A2065 interfaces. The only third party graphics board fully supported in version 1.0 was Retina, but this has since been joined by *Picasso II*, *Piccolo* and *Spectrum*, all based on the Cirrus chipset, and CyberGraphix.

Of course, NetBSD comes with complete source code for the entire system, so there's nothing to stop you writing new device drivers, or hacking the existing ones, if you have the necessary low-level knowledge.

GETTING IT

Versions of NetBSD are available over the net and on several CDs, including the *Gateway* and *Meeting Pearls* sets. You could also download it from the home site, ftp.netbsd.org, or demon (ftp.demon.co.uk) in the UK, but it will take a few hours. There was a version 0.9 for the Amiga but version 1.0 was the first official full release, on the *Meeting Pearls 2* CD – since then it has been supplanted by version 1.1, available on the *Gateway 2* CD. This review is based on several months running an A4000 Warp Engine with NetBSD 1.0, which – despite the low version number – is both complete and reliable.

WHAT YOU GET

The minimal NetBSD distribution comprises 17Mb of programs compressed with Gnu ZIP. You can copy these to an Amigados partition and install from there, but sooner or later you'll probably want to install the source code as well (around 5 Mb, compressed) to compile a custom version on your own machine.

There are hundreds of programs and utilities and programming is supported by GNU C, C++ and Fortran compilers, the GNU assembler, and *Emacs*.

OPTIONAL PANELS

CD SOURCES

Meeting Pearls 2 CD:	NetBSD 1.0
Gateway 1 CD ROM:	NetBSD 1.0, TeX, X11R6
Gateway 2 CD ROM:	NetBSD 1.1
Infpomagic BSDisc:	NetBSD 1.0 & 1.1

FTP SITES

USA	ftp.netbsd.org
UK	ftp.demon.co.uk
Germany	ftp.uni-regensburg.de
Norway	ftp.unit.no

Updates are in /pub/NetBSD.

All the documentation is provided in the form of 'Manual pages' and anyone familiar with Unix will find the system-specific information they need, but bear in mind that Unix comes in two main flavours – System 5 or 'East Coast' Unix, and the Californian BSD version. You can do much the same things either way, but some file locations and commands differ.

Source for thousands of other programs and utilities is widely and cheaply available on the net and CD compilations. Look out for *TeX, PBM Plus*, a great graphics converter, *Xfractint, HylaFAX* and *ISPELL*, an interactive spellchecker (with British dictionary).

INSTALLATION – AMIGA SIDE

Installation is complicated – it requires you to set up special partitions for your Unix files, using the 'advanced options' of the Amiga's HDToolbox utility – and you need at least a passing familiarity with Unix commands and conventions to get the NetBSD side up and running. The installation instructions are pretty good but you need to read and understand it all before you start.

NetBSD needs at least two hard disk partitions – one for swap space, used to hold information that will not currently fit in memory, and one for the system files, known as the 'root'. It helps to set up a third partition for your own 'user' files, but you can put these in the 'root' too. You may want to add more 'local' partitions if you're on a network, or plan to support more than one user – Unix is a multi-user system, and NetBSD runs as a network even if yours is the only 'station' connected.

The procedure for setting up NetBSD partitions is much the same as you'd follow to reserve space for *PC Task* or *ShapeShifter*. NetBSD only supports partitions, rather than so-

Continued overleaf ➡

➡ called 'hard files' mixed in with Amiga data. This complicates installation but boosts performance. Hard Files are many times slower than real partitions, and unbearably slow if more than a few megabytes in size.

Once you've got the BSD partitions set up you can use a public domain BFFS (Berkley Fast File System) handler to make them accessible from the Amiga workbench or shell. This works fine for reading, but has not been tested for writing. In practice this doesn't matter as NetBSD is quite capable of mounting and reading files in Amiga partitions, so you can write files to whichever system you're currently using and read them from the other. LOCK BFFS: ON protects the Unix files from accidental Amiga writes.

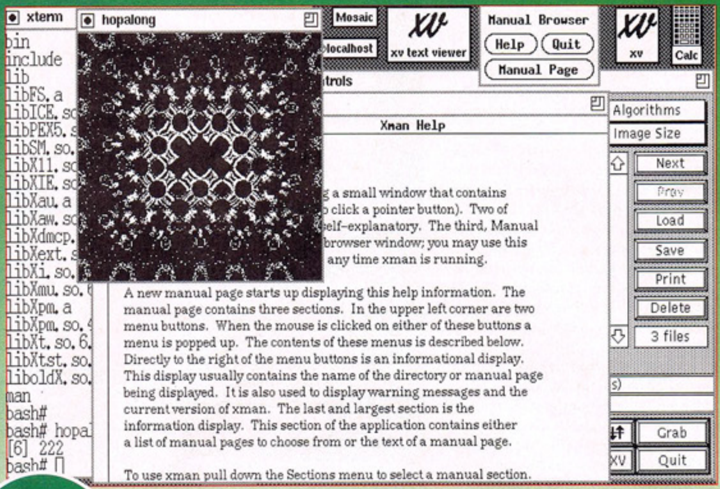
UNIX SIDE

Installation on the Unix side is largely automated. You start by unpacking a compressed archive onto a double-density floppy disk. This is a tiny BSD system, with just enough files to load the rest. Start this by running LOADBSD, a short Amiga program that kicks out the Amiga operating system and begins to load NetBSD from your chosen device.

Warnings and error messages appear as loading takes place, but these are documented and most can safely be ignored. Once you have loaded all the files and answered some questions about disk usage you must run the 'Configure' script and answer questions about your 'network'.

Once this is done you must reboot the system, and edit various files to tell it about your devices, timezone and other local specialities. Beware – you must give a Unix machine warning before a reboot, 'unmounting' file systems and issuing the HALT command. If you use the Amiga three-key Reset without precautions you're very likely to corrupt the file system. At best this will cause a delay as FSCHK fixes the problem – at worst you may lose files or whole directories.

At the third reboot you should have a full, working Unix system which you can start from Amiga OS with a single command. I can confirm that the procedure works, as long as you follow the instructions to the (case-dependent) letter – but it helps a lot to have someone familiar with Unix at hand, especially the first time you install NetBSD.



A Hopalong fractal on top of some nicely formatted *Xman* help with *Xterm* and *XV* underneath.

Test System
Warp Engine 33 MHz 68040 in a Micronik tower with 10Mb RAM, 2Gb SCSI + IDE hard disks (160 Mb for NetBSD), NEC 2x CD ROM, Archive Python DAT drive.

PROBLEMS

NetBSD is unusually reliable, especially in view of its size and complexity. Any problems have almost always been of my own making, and never led to loss of data. As a Net product, NetBSD is well supported as long as you own a modem. Questions and replies are regularly posted on the Amiga mailing list. To join this list, visit the netbsd home page (http://www.netbsd.org) and press the appropriate button, or send mail to majordomo@netbsd.org with the command 'subscribe port-amiga' followed by your name in the body of the message.

CUSTOMISING

One of the beauties of NetBSD is that you get complete source to the entire system, and you are encouraged to re-build it to suit yourself. The resultant version is likely to be smaller and faster. You also get the chance to add support for new devices which have not yet found their way into full distribution.

At the last count there were 'experimental' drivers for the Emplant SCSI controller, MSDOS floppy disks, mono and stereo Amiga audio, and PC card via the 'Golden Gate' bridge board. ATAPI CD support is in the works. You can download patches for Picasso graphics, Ariadne Ethernet adaptors, A4000T SCSI, and Commodore's 2410 display on 68040 systems. There is also a replacement boot block that allows you to go directly into NetBSD, bypassing Amiga OS. If you become nostalgic you can over-ride this with the Amiga startup preferences or by command as NetBSD starts.

CONCLUSION

If you want to run Unix software, and you already own an Amiga with Memory Management hardware, NetBSD is the way to go. It's stable and relatively efficient, although you need plenty of RAM and a big hard drive to use it in earnest. CD's will come in handy for installation, and X looks much better in full colour on a graphics card. If you've already got the hardware, give it a try – you won't be wasting your time.

TABLE 1

DRIVE CONTROLLERS SUPPORTED BY NetBSD

MAKE	MODEL	TYPE
Commodore	A1200	IDE
Commodore	A2091	SCSI
Commodore	A3000	SCSI
Commodore	A4000	IDE
Commodore	A4000T	SCSI 2
Commodore	A4091	SCSI 2
CSA	12 Gauge	SCSI
CSA	Magnum	SCSI 2
DKB	A4091	SCSI 2
GVP	Series II	SCSI
GVP	GForce	SCSI
IVS	Trump Card	SCSI
IVS	Vector	SCSI
MacroSystem US	Warp Engine	SCSI 2
Phase Five	CyberStorm	SCSI 2
Phase Five	Fastlane	SCSI 2
PP&S	Zeus	SCSI 2
Supra	WordSync	SCSI
Utilities Unlimited	Emplant	SCSI

TABLE 2

CURRENT NetBSD PLATFORMS

- Amiga
- Apple Macintosh
- Atari TT & Falcon
- DA 30
- DEC Alpha AXP
- HP 300 & 9000
- IBM PC & clones
- PC 532 (NS32532)
- PMAX
- Sun 3 & SPARC



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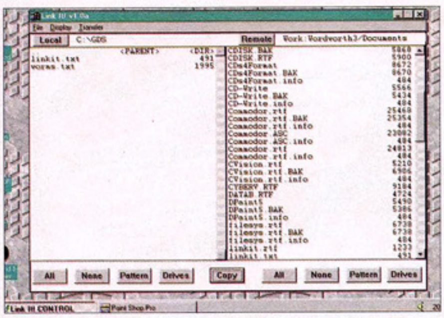
Future PUBLISHING your guarantee of value

http://www.futurenet.co.uk/

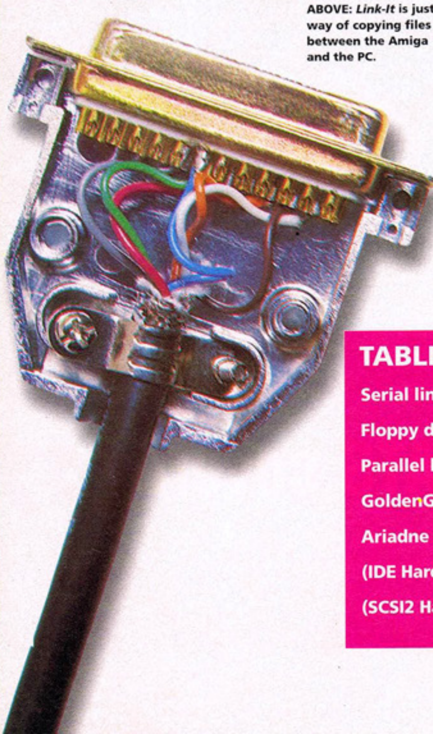


Networking
part 3

In the third and final chapter of our Networking feature John Kennedy has some parting words of advice.



ABOVE: *Link-It* is just one way of copying files between the Amiga and the PC.



There are many different ways to connect Amigas (and Amigas and other computers) together as we've seen in the previous parts of this feature.
Each method has important advantages (cost, ease of use) and disadvantages (cost, obtaining hardware) but speed is one of the most crucial. The speed of a network can make it a valuable aid to productivity, or a pain in the you-know-what. Sadly, beggars can't be choosers which means a lot of us will have to make do with the slower methods.

Table One is a rough guide to the sorts of speed you can expect to extract from a network. Manufacturers like to quote amazing speeds for network links because they conveniently ignore the fact that the data needs to be packaged up with headers and checksums, so these speeds are actually measured speeds from real Amigas.

FLEXIBILITY

Second to speed is the flexibility of the link. For example, a serial port link made via a Null Modem cable isn't very flexible. There is no "file system" created, only a direct one-file-at-a-time system. It's also impossible to connect more than two computers at a time. Parallel port systems suffer the same fate: although they are faster and some are even capable of running TCP/IP, the fact that Amiga computers have only one parallel port is a tremendous limit to the size of the network. One solution is two fit two parallel ports (an option only available to Amigas with Zorro II slots). Incidentally, the new Surf Squirrel adds a second serial port to an Amiga which provides scope for slightly more advanced networks.

The most efficient kind of network is an Ethernet link: this provides the best in the way of speed, plus the best flexibility. As Ethernet is a cross platform standard, it can be connected to a PC or Apple network.

Running TCP/IP means that Internet-style tools such as FTP and *Telnet* can be used, and if necessary, an NFS can be set up too. An NFS is a "Network File System" which allows networked computers to share drives and possible printers. Envoy is an NFS, but it's also possible to run an NFS between an Amiga and a PC running *Windows95* or *WindowsNT*.

Obviously the most popular Amiga is the A1200, but trying to track down an A1200 Ethernet card is tricky.

TABLE ONE – NETWORK SPEEDS

Serial links:	18K/second
Floppy disk port based network:	30K/second
Parallel links:	45K/second
GoldenGateII/NE2000 Ethernet link:	397K/second
Ariadne link:	444K/second
(IDE Hard drive	1024K/second)
(SCSI2 Hard drive	4096K/second)

HOW DO I NETWORK MY AMIGA?

A500

GAMES
- Serial link using a Null Modem cable

DATA TRANSFER (small scale)
- Using a Null Modem cable, create a link via the serial ports and run a terminal emulator package such as NComm. Use ZModem to swap files.



DATA TRANSFER: (medium scale)
- Use ParNet or Liana to link the parallel ports, and then you need to mount a network filesystem (such as Envoy).
- Use an AmiLink network which connects via the floppy disk port, and then run Envoy.

DATA TRANSFER (large scale)
- None currently available.

LOCAL AREA NETWORK
- Liana (two machines)
- AmiLink (two or more)

INTERNET STYLE TCP/IP NETWORK
- Use NULL MODEM cable and SLIP driver.

A1200

GAMES
- Serial link using Null Modem cable



DATA TRANSFER: (small scale)
- Using a Null Modem cable, create a link via the serial ports and run a terminal emulator package such as NComm.
- Use ZModem to swap files.

Using a Surf Squirrel will make the link faster.

DATA TRANSFER: (medium scale)
- Use ParNet or Liana to link the parallel ports, and mount a network filesystem.
- Use AmiLink network which connects via the floppy disk port, and run Envoy.

DATA TRANSFER: (large scale)
- Use PCMCIA Ethernet card with SANA-II driver and use Envoy.

LOCAL AREA NETWORK
- Liana (two machines)
- AmiLink (two or more)
- Ethernet (two or more, or between Amiga and PC and/or Mac)

INTERNET STYLE TCP/IP NETWORK
- Use NULL MODEM cable and SLIP driver.
- Ethernet adapter and TCP/IP stack.

A4000 (or any Zorro II based Amiga)

GAMES
- Serial link using Null Modem cable

DATA TRANSFER: (small scale)
- Using a Null Modem cable, create a link via the serial ports and run a terminal emulator package such as NComm.
- Use ZModem to swap files.

DATA TRANSFER: (medium scale)
- Use ParNet or Liana to link the parallel ports, and mount a network filesystem (such as Envoy).
- Use AmiLink network which connects via the floppy disk port, and run Envoy.

DATA TRANSFER: (large scale)
- Use Ethernet card: either Ariadne ZorroII card, or GoldenGateII and NE2000 PC clone network card.

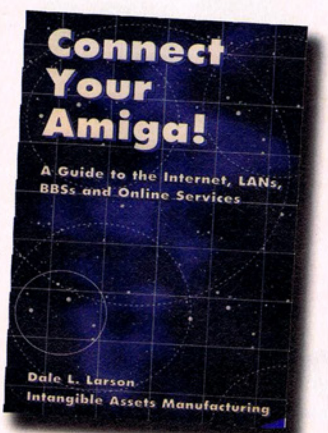


LOCAL AREA NETWORK
- Liana (two machines)
- AmiLink (two or more)
- Ethernet (two or more, or between Amiga and PC and/or Mac)

INTERNET STYLE TCP/IP NETWORK
- Use NULL MODEM cable and SLIP driver.

Ethernet adapter and TCP/IP stack.

Although PCMCIA Ethernet cards exist for the PC, trying to find similar cards for the Amiga is difficult. It's not that the hardware is different but SANA-II drivers for them are hard to come by. One company which does claim to produce A1200 Ethernet cards is Hydra systems, and although the cards are expensive, they appear to be the only choice at the current time.



If these tutorials have whetted your appetite then Dale L Larson is the next stage.

ESSENTIAL READING

The best resource for those interesting in networking and the Amiga, is without doubt, the book "Connect your Amiga!" written by Dale L. Larson, of Intangible Assets Manufacturing. Mr Larson is responsible for the SANA-II standard and Envoy, so there is a very real chance that he knows what he is talking about. The book covers a great deal: from modems and Bulletin Boards, through to local area networks, Envoy, the Internet and TCP/IP. It answers a great many questions, and points you in the right direction if you need more information. "Connect your Amiga!" is available in the UK through mail order from Almathera Ltd.

To summarise, if you need to network two Amigas in order to exchange files, the simplest way is to use the serial ports and some comms software. If you need a file system approach, you should use ParNet, or Liana and Envoy. If you want a fast and powerful local area network, you should use Ethernet if at all possible, and Envoy again.

ALTERNATIVES TO NETWORKING

If you need to swap files between different computers, but you don't want to network, there are various ways and means. First of all, if the data to be transported is small, consider using a floppy disk. PCs and Apples can read double-density floppy disks (the type the A1200 uses) as long as they are formatted in MSDOS standard. The Amiga can read these files too if the *CrossDos* utility is used.

There are problems though: for a start the disk capacity is only about 800K, and even the high density disks used in A4000s will only store just over 1Mb. Further, the MSDOS naming convention forces all files into the brutal upper case 8.3 form, which can be a problem. An archiver such as Zip or Arc will help in some respects, but the floppy is a severe limitation.

Removable disks are a much more workable solution. Think of the Zip or EZ135, which both can hold about 100Mb of data on one disk. SCSI versions are available, which means any Amiga with a SCSI interface will be able to use them without any trouble. The disk can then be carried or posted to the other machine. For larger capacities, the Jaz drive will store about 1Gb of data, which is probably enough for most people.



The immensely popular Zip drive from Iomega can hold 100Mb of data.

This month in *Total Football*...

SHEARER

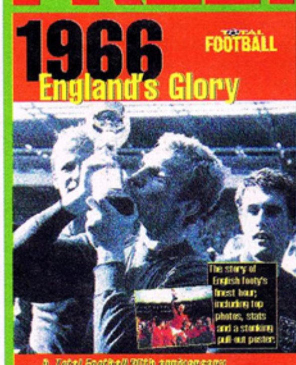
Is he REALLY the best striker in Europe?



ANDERTON

Exclusive interview with the boy Darren

FREE!



Total Football's **24-page celebration of the 1966 World Cup Finals, featuring the big names, the top goals and the little blokes from North Korea...**

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ISSUE 12 ON SALE NOW!

AF SCREEN PLAY Previews

If there's a game coming out for the Amiga in the next few months you'll read about it here first...



Andy Smith

This month's Previews section has a theme running through it. Most of the games featured are from BPM Promotions. Most of the games featured have been created using BPM's Reality Software Construction Kit. This raises an interesting point: If a software construction kit like Reality becomes really popular – and for that to happen the kit would have to be exceptionally good – the Amiga games market could once more explode. Now I don't know if the Reality Kit is any good or not because I haven't had chance to play around with it and I haven't really had the opportunity to play any of the games created with it thoroughly.

But, for the moment at least, let's assume it's a hot tool. I can see some creative types getting hold of the thing and pumping out games that will keep us playing for years! Of course if the thing becomes too popular then everyone will be creating their own games and there won't be a market to sell to. But that's not going to happen because there's always going to be people who'd rather pay a few quid to play someone else's games than bother to create their own – people like me.

The games market may be changing shape, but that's all it's doing. It doesn't look like it's going to come to the grinding halt that some thought it would, in fact, this may be just the beginning. Now there's a scary thought!

AMIGA FORMAT'S REVIEW POLICY

Every month we scour the world's software houses for the latest and greatest Amiga games. We try to ensure we keep you as up-to-date as possible and we'll stop at nothing to bring you the best, definitive, no-nonsense reviews of the games that matter.

WHAT OUR REVIEW SCORES MEAN

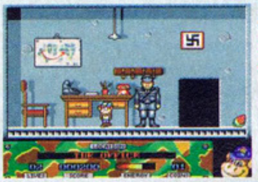
90+%	The crème de la crème. Only the very best, most playable and original games are awarded an *AF* Gold – the most highly prized rating there is.
89-80%	These games are very good, but due to minor flaws are not the finest examples of their genre.
79-70%	Good games which are worth buying, especially if you have a special interest in a game type.
69-60%	Average releases with somewhat limited gameplay and appeal. Games in this category tend to be flawed.
59-50%	Below average games which are unlikely to impress your mates or your wallet. Avoid.
49-40%	Overwhelmingly poor quality games with major flaws and appalling gameplay.
Less than 40%	The absolute pits.

THE GREAT ESCAPE

All Amigas ■
BPM Promotions ■
01232 626694



RIGHT: Charlie finds a coin and pushes his luck by staring down the barrel of a German tank.



LEFT: Our heroic chimp has a chat with the camp commandant. Presumably to ask the way out.

Charlie Chimp in the Great Escape is part of the Reality Games Pack 2. A quick look at the screenshots tells you that the game's set in a Prisoner Of War camp and the task is to guide Charlie around the camp collecting bits and pieces in an attempt to, well, escape.

Like all the other *Charlie Chimp* games it's a kinda platform adventurey type game. The gameplay's as old as the hills but as you can tell from the screenshots it's all well polished. Guide Charlie round the camp, over crates, down tunnels and collect bits of equipment to use elsewhere.

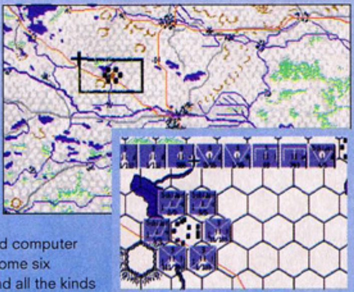
There are also scores and coin bonuses to pick up as Charlie scuttles about the place and, of course, the camp's swarming with rats that must be avoided. Contact with the rats causes Charlie to lose energy and when it's all gone he's dead. We'll be reviewing this game as a part of the Reality Games Pack 1 in the very near future.



ABOVE: Charlie finds his way barred by a bloke with a gun. Still, he's managed to find a pair of jack boots. Hurrah!

WHITE DEATH

All 1 Mb Amigas
■ Guildhall Leisure



A small part of the German army camped around a town in Russia. In 1942. They're soon to be joined by lots of other Germans.

A close-up of the German army camped around a town in Russia. The others at the top are waiting to be positioned.

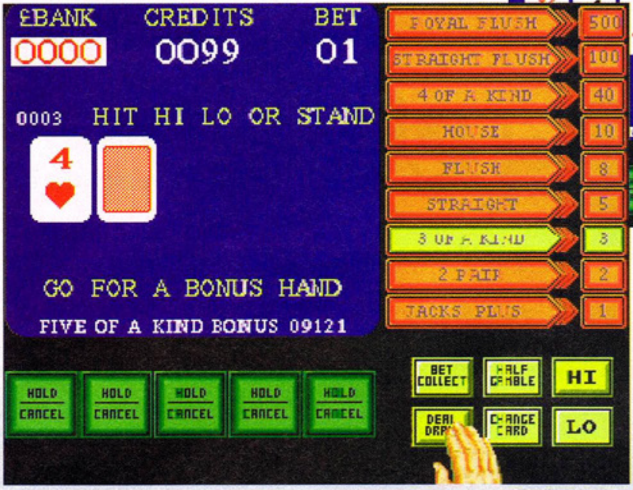
Just when you thought things were looking grim on the wargames front here comes *White Death* (or to give it its full title: *White Death, the Battle for Velikiye Luki, November 1942*).

It's a wargame. Set in Russia in 1942 where the German Sixth Army sits starving (and a bit chilly) in the city of Stalingrad while the Ruskies get ready to launch a massive offensive against 'em.

It's based on the board game of the same name, game features a very sophisticated computer opponent, some six scenarios and all the kinds of things you'd expect to find in a wargame: weather effects, morale and the all important Tank Fright. Whatever that might be. Actually, I've got it all ready I think. I'm always terrified whenever I see a tank coming down the High Street. It's the same feeling of terror I get whenever I forget to make Cathy a cuppa in the morning. In fact I think I'd rather face a tank.

Continued overleaf ➡

JOKER POKER



ABOVE: I got another 3 so now I get to play Play Your Cards Right. Which is hosted by TV presenter Bruce 'Good Game, Good Game' Forsyth.





ABOVE: Ooh! That's a promising start. I've changed the other three cards and hope to be dealt another three in the next three – if you know what I mean.

TOP: Here's a rarity – it's not very often that you get past the second card when you're playing Play Your Cards Right.

BPM Promotions ■ 01232 626694

Gambling. It's a laugh isn't it? You stand the chance to win lots of money for a small stake. But most of the time you just lose the small stake. But you could have won lots of money, so you don't mind losing the small stake. Except lots of small stakes become lots of money, which you were trying to win in the first place. Blimey! We're intelligent beings!

Now try coupling gambling with some skill, like a game of poker. The skill is knowing which cards to get rid of, which cards to keep. And then betting small stakes on the hope that the cards you've chosen are better than anyone elses. Except you don't know what anyone else has got and usually it's better than what you've got so you lose your small stake. But you could have beaten them and won their small stake.

Now take a coin-operated machine. You put in little stakes in the hope of winning small stakes. Except the machine is only programmed to pay out at a rate of 75% of the investment. That 25% gap means the machine wins, in the long-run, every time.

This is a game based on a coin-operated poker machine. You put in, well you'd call it 'cyber-money' these days and if you win you get 'cyber-money' back. Great. You don't win a thing. But then you don't lose anything either and you have fun in the process. We'll see if this game which is part of the Reality Games Pack 2 is any fun or not next month.

WRATH OF GWENDOR

BPM Promotions ■ 01232 626694

Haven't got a clue who Gwendor is in this game which is part of the Reality Games Pack 1 but it's a sideways scrolling kind of beat-em-up thing in the mould of *Shadow of the Beast*, or anything from the early 80s on the Speccy or C64. Hang on. This is ringing a familiar bell.

You play the part of some bearskin shrouded chappie armed with a big club. You walk around a bit and bash a variety of monsters that come at you from both sides of the screen (and sometimes from the air).

The monsters take several hits to die, but every one killed releases a gold coin that can be collected. I've no idea what you can spend the coins on yet, but will do when I've reviewed the game properly. Oh! Nearly forgot, there are other traps and hazards to be avoided such as bloomin' great spikes that come out of the floor. And there are switches (like the headstone that can be moved left or right) which probably do something important in the game, but again I don't know what just yet. Watch for the review next month.



A big spike lunges out of the ground and narrowly misses our hero. There's also a flying monster in this picture. As you can see for yourself.



There's no point trying to fight this blue head thing, it spits fireballs which are best avoided. Quick let's rush on to the next screen.



After bashing some monsters gold coins have been released. If our hero turns round and bashes another monster, there will be another gold coin released.

The World's FASTEST AMIGAS are on this page!



THE FASTEST BOARDS AVAILABLE, NO ONE ELSE COMES CLOSE!
COMPARE THE PERFORMANCE FIGURES FOR YOURSELF!

Std A500/600/1500/2000	0.55/0.72
Standard A1200	1.33
Standard A4000, '030	4.43
A1200 with 1230-IV, '030 & 4Mb	9.91
Standard A4000, '040	19.10
A1200 with 1260, '060 & 4Mb	38.71
A1500 /2000 with 2060, '060 & 4Mb	38.71
A4000 with Cyberstorm, '060 & 4Mb	39.85

Comparative MIPS performance figures measured using SysInfo. Each board had the appropriate SIMM fitted (required to activate accelerator).

CYBERVISION 64

64-BIT ENGINE A3000/4000 24-BIT COLOUR ACCELERATED GRAPHICS CARD. For all Zorro-3 Amigas, this 64-Bit high speed graphics engine/blitter offers up to 1600 x 1200 pixels in 8-Bit colour or 1024 x 768 pixels in True 24-Bit Colour, with 2Mb of display memory (4Mb user upgradeable).

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FREE PhotoGenics LITE...Powerful software for image manipulation - the ULTIMATE 24-bit graphics package for A3000 or A4000! Includes 27 effects for processing photos/images such as Emboss, Solarize, Texturize, Add Noise etc. as well as Paint Tools inc. Chalk Pastels, Crayon, Felt Tips & more - Brilliant! (Packaging is shown for illustration purposes only and is not included)



CYBERSTORM II

THE WORLD'S FASTEST... NO QUESTION!

NEW



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World Golf

In which Andy Smith proves that there is such a thing as a good review spoilt.



Here I am, ready to tee off. You can tell it's me because I've got this big plaque above my head with my name on it.



I could make par here if I try really hard. What's the betting it takes me another ten shots to get it in though?



Ooh Vic, I've fallen. Leave your man alone and he falls over. Or throws his golf club in the air, which lands on his head.

There's this little chap in the middle of the screen. There's this little cross-hair that the player moves around the screen in order to direct the ball once it's hit. There's this little power meter at the bottom of the screen which controls the strength of the shot. There's this little picture showing the player what club he's going to use for the next shot. There's not much more to say about this computer golf game.

Cyber Money

A good walk spoilt? Quite probably. A good blank disk spoilt? Nah, that's a bit too harsh. There's nothing really wrong with the game, it's just that it doesn't manage to make itself very appealing. There's nothing clumsy or awkward about the controls, it's all very easy to get to grips with, it plays pretty much as you'd expect a computer golf game to play and it doesn't fall over or crash. It even has a 'skins' option which is fun because you can play for 'cyber money'. That's my new phrase for money that you can't actually spend because it only exists in computer games. Actually, I bet that phrase has been around for years already, but I only thought of it the other day so I'm going to keep using it whenever I get the chance.

Sensible Golf's a better game (*AF* 74 81%) so if you're looking, particularly, for a golf game then that's a better choice. Not that I liked that game much either. Cripes! You can't go around saying you didn't like a Sensi game! Well, I didn't like it so there you go. There's no way I would have given it 81% for a start. I would probably have given it something like 63 - 64% tops.

Motor Racing

Oh! Nearly forgot. You can have lots of players in the game - well, four out of a maximum of 64. Imagine sitting there waiting for 60+ computer players all to have their turns! I bet some people do it as well! There really is nowt as strange as folk! There are also five different courses to play on. Though what the differences are between golf courses is beyond me. I mean, in motor racing and stuff you can see the differences between different courses – some have lots of straights where you can go really fast and some are really twisty. What's the difference between standing say, here, and whacking your ball towards the pin which is way over there? 'Ah, but the subtle placing of bunkers and things', the golf fans cry. Rubbish. They're all the same and that's that. And it's a bloody elitist sport. Where are all the municipal golf courses in the middle of housing estates eh? Eh? And no, you can't put a motor racing course in the middle of a housing estate (although that's an arguable point, especially if you live on a housing estate that's anything like the ones I grew up on), because all the kids would get run over (just like they did on the housing estates I grew up on. The only difference these days is that the Capri is no longer the boy racer's drag car of choice).

Sorry, it's a golf game that's all right, but not very brilliant. AF



This looks tricky. What's the betting I manage to thwack the ball into the water eh? Eh?



The map screen. That's me just on from the teeing off area. In the rough. Amongst the trees. Don't know how that happened...

WORLD GOLF

Publisher
Apex Systems

Price
£14.99 (mail order only)

Versions
A1200

System requirements
All Amigas with 1Mb

Release date
Out now from Apex Systems, 8, Gosling Gate Road, Goldthorpe, Rotherham, South Yorkshire, S63 9LU

5/10 GRAPHICS
Absolutely average. Nothing much going on here.

4/10 SOUND
At least you can turn it off if you like. Birds and wind mostly

3/10 ADDICTION
Grrrrrr. Not really

7/10 PLAYABILITY
Simple to play, even with lots of people all at once

OVERALL VERDICT

Nothing remarkable in *World Golf*. It's not dreadful but it's not very special either.

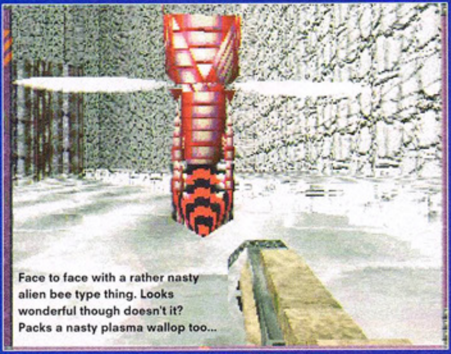
52%

Alien Breed 3D II
THE KILLING GROUNDS

A gang of crazed aliens burst out of our postbag with all manner of evil alien weapons blazing. We just pointed them in Andy Smith's direction.



See how your assault rifle takes up so much of the screen? See? See? Yes, I thought so.


Face to face with a rather nasty alien bee type thing. Looks wonderful though doesn't it? Packs a nasty plasma wallop too...

This is it – possibly the most important game release for the Amiga this year, and possibly our last, best hope for a decent *Doom* clone. The plot follows on from the first *Alien Breed* game, so I'm not even going to start getting into the storyline here. Also, as you complete each of the 16 levels in this game you're given a screen or two of text which fills you in with exactly what's going on anyway.

Besides, the last thing I want to do is ruin the fun you're going to have when you buy the game and start to discover what's going on for yourself. Suffice to say this game's got a cohesive storyline running all the way through it that adds to the atmosphere and excitement.

So what am I going to tell you about this game? I'm going to tell you what it's like to play *Alien Breed 3D II*. But first, a couple of lines of background: it's a *Doom* clone on the Amiga. It's you versus a whole bunch of flying, running, crawling – but all tough – alien monsters. Or, in two player mode, it's you versus a mate in a pure *Deathmatch* battle (c'mon chaps, good though the A1200 is, it's not going to handle the data flying between two linked Amiga's fast enough to have monsters running around in there as well).

Collect 'n' Kill

Rush around the levels, shoot pretty much anything that moves, collect ammo, collect medikits, collect security keys and passcards that allow you access to otherwise inaccessible parts of the level, collect 'n' kill. In a nutshell.

It's 2am. You're a 19 year old bloke. It's Saturday night and the clubs are kicking out – that includes you. You have spent the night chasing this gorgeous girl in the club, the kind of girl that encapsulates everything you could ever wish for in a young woman. It wasn't until you'd bought her her second drink that her gorilla/thug of a boyfriend made his presence known and made it clear that he wasn't impressed with you giving his young lady your attentions.

You know she doesn't like him as much as she likes you (hey, you're 19 after all), but you also know that you don't want a broken nose. It's definitely time to find your mates.

I
reed 3D
GROUNDS

They've all left. You stand in the drizzle outside the club for a few minutes before deciding they've probably all left and it's time to head for home. Forgoing the burger van you head for the shortcut through the park to your side of town. Watching your feet as you walk along – amazed how they just seem to run on autopilot – they just keep going one in front of the other! Incredible! You don't even have to think about walking as you amble from one side of the pavement to the other but still going vaguely forward. Anyway you're mind's on something else. Someone else.

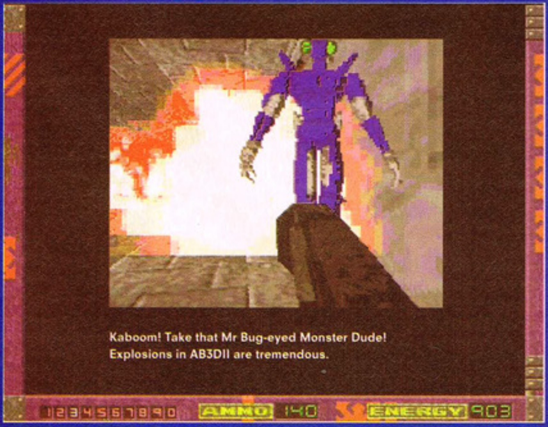
Pounding

You remove the cigarette dangling from your mouth as you reach the alleyway that is the shortcut. You look up and your heart drops. Up ahead is gorilla/thug and three of his mates. They're stood around, laughing. They spot you a second after you spot them. Your heart's pounding. Gorilla/thug stops laughing when he recognises you. He pushes himself up from the railings he's been leaning against. His mates stop laughing as they first look at him and then follow his gaze to you. Your heart is absolutely pounding.

To achieve the same effect, turn the lights off, plug your A1200 into the stereo, shut all the doors and start playing *Alien Breed 3D II*. Yes really.

And how's this feeling achieved? Through a combination of several factors, so let's take 'em one by one (c'mon then! C'MON THEN!). Factor one: lighting. Dark and eerie for the most part but with excellent highlighting throughout – you just feel that the lights you see up ahead are real. Likewise, the dark tunnel up ahead could contain anything – you fire a plasma bolt down the tunnel and watch the light the plasma bolt

Continued overleaf ➡



Kaboom! Take that Mr Bug-eyed Monster Dude! Explosions in AB3DII are tremendous.

THE BIG PICTURE. THE BIGGER PICTURE.

A bog-standard A1200 is fine to run this game. It just means you have to run the game in a small pre-determined window. If you've got an accelerator card of some sort, then you can run the thing at almost the same speed in full-screen mode. This is really scary when the lights are off!



The very start of the game. He's how the screen looks in full-screen mode. It slows things down however, so most of the time you'll be playing the game like this...



Exactly the same shot as the last one, but this time with a much reduced window size to keep things zipping along.

BIG ISN'T ALWAYS BEAUTIFUL

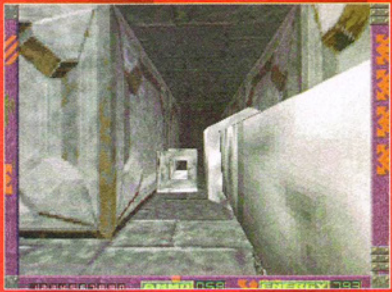
It's traditional in these games to find the biggest, hardest, porkiest weapon and stick with it (ammo allowing). That's not always such a tremendous idea in *AB3D II* because some of the bigger weapons get in your way. You can't really see much of the screen when you're using 'em! Of course they're still useful, but they're best used when you know that, say, there's a really big robot round the next corner. Back off, switch the big weapon, rush round the corner, loose off a couple of shots and duck back down the alley. Change weapons again and then go take a tentative look round the corner.



A situation you'll find yourself in a lot. Down there it's a bit dark and scary. Instead of just pelting down there blind...



...try lighting the place up first! Pump a shot down the corridor and any potential hazards will be highlighted. You've got to have spare ammo for this though.



And just to show you how much those big weapons can hinder your vision. Here's the same shot as the last two, but with a bloody great rocket launcher taking up most of the screen.

emanates to see if anything shows up. You watch as the plasma bolt impacts on the wall at the end of the tunnel – lighting up the area around the impact for a few brief seconds. Tremendous stuff.

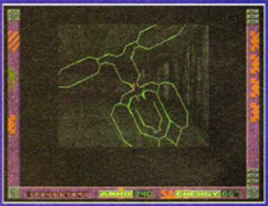
Factor two: weapon variety – you know all about this really, how it's best to use some weapons in some situations and others in er, others. Like lobbing grenades into areas thick with baddies and saving the big lasers for the big baddies. Common sense really. One thing that must be mentioned is the explosions – Tremendous stuff.

Factor three: enemies. Loads of 'em. Loads of different kinds and yes, they do have some semblance of intelligence in the way they gang up on you and move around so it's harder for you to hit 'em. And they only track you by sight, so if you're a good ducker and weaver, you can surprise them. One point here though – I found it bloody difficult to shoot at things in the air – especially when you have two or three baddies on the ground as well. Your shots tend to go for the ground targets first which tends to give the airborn baddies a free hand at your energy level. The thing to do is run around (if possible) until you can get 'em separated (but that does usually mean you running around into a new bunch of baddies).

Find your way

Factor four: auto-map. This superimposed map is a Godsend. Use it often. You don't end up playing off the map because it becomes too confusing to look at both, but when you've got a spare moment to call the thing up it's mighty handy.

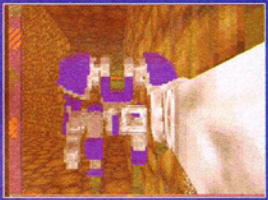
Factor five: sound. Spooky. Extremely good attempt to make sound cues a vital part of the gaming experience and they work too. Some of the sounds are crap though – the levels with metallic floors are a pain because your tin shoes clatter along them constantly. The "monster-dying" sounds also grated on me. But maybe that's just me. Overall the way



Your auto-map (or holo-map as the game calls it) is a most handy feature. Use it whenever you get the chance to.



Up to your knees in slime that hurts. That thing up ahead is Passkey No2 which you'll obviously need to open the locked door marked No2.



These big weapons are all well and good, but they really can be a bit of a pain when it comes to seeing things ahead.



Look at the size of that thing! And with only 157 energy left, there's not a chance I'm going to be able to take him out.





The very first level and already the game's excellent lighting effects are much in evidence.



Up close and in yer face. Flying monsters can prove to be the hardest to kill, so take 'em out first if you can.

sound's been used in this game is a great example of how sound, when used well, can really enhance the playing experience – and I'm not talking about jolly little ditties that spark the action up, I'm talking the eerie sounds of monsters-in-a-room-not-too-far-away.

All the other factors: level design – varied, challenging, including areas you don't have to go if you don't want to. Difficulty curve: starts out bloody hard and gets bloodier and harder.

Put that lot together and you have a formidable combination that is fun and exciting to play. Apparently, the game's full of secrets to discover as well (we all know the first one was full of secret areas to find) and I have to come clean here and tell you I didn't find any (the only thing you can ever find is a pint at the end of your arm - Ed). I don't doubt that there are loads, but I'm a more kinda progress player – all I want to do is find whatever it is I need to get me onto the next level. I dare say that some day I'll go back to look around for secrets and stuff – especially on the levels I'd got to know like the back of my hand.

The Best

But surely 16 levels isn't going to last? For a start, yes it is. These levels are tough! You'll be crying they're too tough at some points and I'd probably have to agree with you. The most noticeably difficult ones are when the level starts with you facing half a dozen monsters who are in the air and another half a dozen lumbering their way towards you on the ground.

But there's the level designer included with the game. Now you can make up your own levels, swap 'em with mates or even upload them to Team 17's Web site (well the good ones anyway). You can even use your own textures and graphics. Blimey! The fun just never stops!

It's unoriginal. It's been done to death, as a gaming genre, and even the Amiga has had it's fair share of games of this type, but that doesn't stop the enjoyment. This game is a joy to play. No, it's still not as polished as *Doom II* or *Quake*, but then you don't have to spend £2,000 on a machine that will enable you to play one of those games. What you get is a bloody good approximation of those two games with the same level of excitement and tension, but with slightly less polished graphics.

If you've already got a good *Doom* clone like *Alien Breed* or *Gloom*, you haven't got the best. This is the best. Go and get it and don't worry about having any spare time for two or three months.



Now these blokes are real pains. They move fast and they bite and they keep cropping up throughout the game. Are you ready for your close-up?

ALIEN BREED 3D II

Publisher
Team 17

Price
£25.99

Versions
AGA Amigas

System requirements
2Mb (more RAM and accelerator recommended)

Release date
Out now

9/10 GRAPHICS
Very varied, very smooth, very well implemented but not the best ever.

9/10 SOUND
Mostly used brilliantly but some of the effects detract from the overall gaming experience.

9/10 ADDICTION
Hooks you and keeps you. The difficulty just ups your determination to succeed.

10/10 PLAYABILITY
Joystick, mouse and keyboard are covered.

OVERALL VERDICT
Better than *Alien Breed* and *Breathless* simply because of the extra features. Glorious stuff.

96%



Woah! Rockets can certainly do some damage if you manage to actually hit something with 'em! Again, fabulous explosions.

They don't come in posh boxes with manuals. They are 'mastered' on second-hand floppies. They are, of course, the...

Reader Games

Everyone thinks that they can write a decent game, but most of us also realise that it actually involves quite a lot of work and so we don't bother and just end up going down the pub instead.

Some people, however, are determined to prove that they can write a decent game and so they send their babies in to us for us to sort of 'mark'. A bit like homework I suppose. And, more often that not, the games are great. Some are, indeed, better than a lot of commercially available games.

Just one or two though, are not worth the disk they're saved on. And yet we'll include them in this section just the same. Hi ho.

GAME: PROJECT SHIELD
AUTHOR: UNKNOWN
LANGUAGE: UNKNOWN

What on Earth is the matter with some of you people? We get this game disk in, there's no letter with the game, no name on the disk no nothing. When we boot the disk up there's a message for us telling us about the game and the demo of another game that's on the same disk AND NO NAME OR ADDRESS!

This is doubly galling for us because this is not only the best (technically at least) game we received this month, it's one of the best we've ever received.

It's a kinda solid 3D adventure type game – not unlike the old Incentive games *Driller* and *Darkside*. It's not brilliant in that the puzzles are all a bit obvious – and a little slow.

Someone in the office here remarked 'It's *Doom* in slow-motion'. Which it is, without the manic blasting action. There's a lot of running around (bumping into door jambs) and the occasional bit of frantic key manipulation while you try to pick up things before you get hurt.

The game lacks any significant hooks to keep you at the keyboard and I couldn't see myself playing it for days on end, but it's technically wonderful and more than a worthy winner of this month's prize. Now let's hope whoever wrote it lets us know who they are.





The first level of *Project Shield*. The graphics are smooth, fast and very three dimensional.



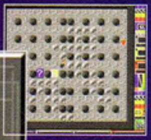
I just know that through the door on the right there are some armed droids waiting to massacre me.

VERDICT: TECHNICALLY TREMENDOUS BUT LACKING THE ADDICTION AND TENSION THAT A GAME OF THIS TYPE SHOULD GENERATE. A FEW MORE TWEAKS AND DEEPER, MORE COMPLEX (WITHOUT BECOMING ILLOGICAL) PUZZLES WOULD HAVE MADE THE GAMEPLAYING EXPERIENCE AS THRILLING AS THE PROGRAMMING IS REMARKABLE.

GAME: BOMBER PRO
AUTHOR: GAVIN WOOD
LANGUAGE: UNKNOWN



After each level of the game you get the chance to spend any credits you may have picked up.



A Bomber Man clone, complete with things to pick up and red wedges to avoid.

Any other month and this would have won the Star Prize. There's actually a bit of a debate raging within myself. *Project Shield* is technically very impressive, which is why it's won, but *Bomber Professional* is a much better game to play. Should technical excellence or sheer playing fun be rewarded? I've leant towards the technical side of things but that's primarily because at least *Project Shield* is an original game. *Bomber Pro*, is after all, a *Bomber Man* clone.

If I'd gone the other way I'd be equally unsure whether I'd made the right choice, so maybe some of you would like to drop me a line and give me your opinions.

The game is a damn fine clone with loads of extra added bits, like a shop where you can buy power-ups, four player simultaneous play and a built-in level designer.

A short re-cap: drop bombs around a maze to destroy the monsters and reveal the exit. The levels that come supplied are superb. It's a great game, get hold of it if you can.

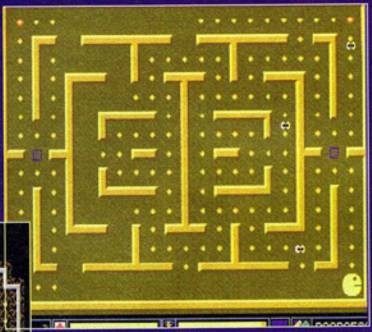
VERDICT: CHALLENGING, ADDICTIVE AND EXCELLENT FUN. IT MAY ONLY BE A CLONE BUT IT'S HIGHLY POLISHED WITH SOME GREAT NEW FATURES THAT REALLY IMPROVE ON THE ORIGINAL IDEA.

GAME: MUNCH
AUTHOR: DAVID PRUDENCE AND GARY WATSON
LANGUAGE: AMOS PROFESSIONAL

Pac Man with knobs on. Lots of knobs. As well as the usual 'run around, chomp the pills and avoid the ghosts' there a whole load of extras that can be picked up: shoes to make you go faster, bombs to wipeout the ghosts and clocks for extra time (every level has a timer, but it's quite generous so don't worry too much).

There are some neat tricks whereby the levels within the game are some five or six screens long – basically you nip out the side of a level only to discover you're in another level that's also got an exit on the far side. You head for that and again you're in another level – get the picture? Yes it's good fun, yes the extras add another dimension to the tried and trusted game format and no it's not a game that you should definitely have in your library because, let's face it, you've probably got a dozen *Pac Man* clones in there already and this isn't something so different that you must have it. Bearing in mind though, this is a Reader Game, and as such the quality is – as all the submissions are this month – very high.

VERDICT: A FINE EXAMPLE OF JUST WHAT A *PAC MAN* CLONE SHOULD BE AND IT SHOWS THAT ITS AUTHOR HAS BEEN MUNCHING THOSE POWER PILLS. WHILST BEING OF A VERY HIGH TECHNICAL STANDARD, AT THE END OF THE DAY IT'S JUST ANOTHER PAC MAN CLONE HOWEVER AND THERE ARE FAR TOO MANY OF 'EM AROUND ALREADY.



It's a *Pac Man* clone. Obviously. Munch those pills Pac. Munch those pills. Hi ho.



The end of a three-screen series of mazes. Each maze is full of pills to chomp and ghosts to avoid.



Applejack, a sour grape and a magic ball bouncing round the screen.

GAME: APPLEJACK
AUTHOR: NEAL GOODWIN
LANGUAGE: BLITZ BASIC 2

This month's 'so well polished you'd think it was a commercial release' goes to Neal Goodwin for his game *Applejack*. The front-end, in-game menus and associated bits are absolutely great – they simply can't be faulted.

Again though, the game format is pretty familiar if you've played anything like *Boulderdash* or *Dig Dug* or one of the thousand clones in the 'collect things by digging tunnels' genre. It's all about collecting cherries by digging into them. You've got apples that fall from their position if you dig under them (hang around and they'll kill you if they land on your head), and these are handy if you can time digging under them so they fall when one of your enemies (the sour grapes no less) are passing underneath.

There are quite a few of these sour grapes chaps running around chasing you and when they get you you lose a life. The answer? Fight back with your magic ball. Fire the ball and it goes bouncing off down down the tunnels you've created until it either hits a sour grape (killing it for a while until it's re-born) or comes bouncing back after a while.

Not only is it superbly presented but the game is fun to play – even if it is a little tough to start with (a few fewer sour grapes on the earlier levels may have made life easier for newcomers).



Things are getting slightly more hectic now as you've got three sour grapes running around. And you need to mind the apples – they kill you too.

VERDICT: TOP QUALITY PRESENTATION AND TOP QUALITY GAMEPLAY TO MATCH. AS SEEMS TO BE THE THEME OF THIS MONTH'S GAMES, IF ONLY THE IDEA WAS ORIGINAL THIS WOULD RECEIVE EVEN HIGHER PRAISE THAN IT ALREADY HAS.

MORE OF THE SAME PLEASE!

This Reader Game's section is becoming so popular that we're looking to expand it. And there's something in it for you! We're going to be awarding the top Reader Game a huge £50 cash bonus each and every month.

Now if that doesn't inspire you to get those submissions in then nothing will.

Just a note of caution though: don't bother sending in that PD game you coded three years ago just to try it on, we'll spot it and chuck it in the bin. After we've erased the disk for good measure.

And, in the event that your game is so good we want the world to see we'll probably run the game as a Coverdisk demo on the floppy or CD. Obviously if this is completely unacceptable for you then you'll have to indicate this in your notes with your submission. Your notes should also include what language the game's been written in.

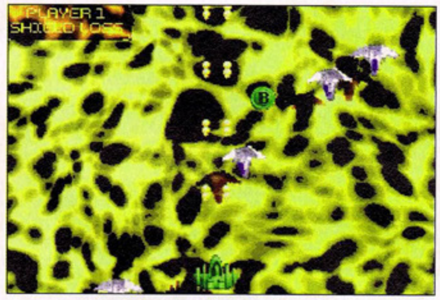
Get to it people, let's see those games come flooding in.

GameBusters

Get more from your games! Put an end to tearing your hair out! The answers are all here, sit back, relax, chuckle at our scheming ways of getting you past the bits the programmers thought impossible! Ha Ha!



Some games are tougher than others, but thanks to this month's special guests, WeatherMine, getting through *XP8* should be a doddle!



Like the man says, you've got to grab the Power ups when you're given the chance. Like this one here.

XP8

XP8 is the best shoot-em-up we've seen in recent months (*AF*85 85%) and it's certainly no pushover. So when we met up with the chaps who created the game – WeatherMine Software – we asked them to get their pens and paper out and give us the inside info needed to get the best from this lil' corker. Here's all the gen then, straight from the horse's mouth.

Power Ups

Power ups can be obtained from shooting the bonus ships, and from shooting the power ups trapped inside domes on levels two, four and five. In addition there are hidden bonuses on levels two, four and five:

Level Two: Some of the groups of barrels can be shot to reveal a bonus.

Level Four: Some of the small rectangular buildings do the same.

Level Five: Some of the small domes reveal power ups.

You can tell which ones have hidden power ups, because they can be shot (and take several shots to be destroyed).

Power ups are also produced each time you destroy a certain number of ships, and the required number of ships to destroy increases by ten each time. For example, on the first level you get a power up after 35 ships have been destroyed, then after another 45 and so on. This number can be reduced via the 'power up frequency' setting in the options. Remember the level is wider than the screen so search around for special buildings hidden near the sides.

HELPING HANDS

INNOCENT UNTIL CAUGHT

I can't seem to get the bonds out of the vault. I keep getting told that there is some kind of laser or alarm system in my way and it's driving me crazy!

Lorna Davies
Luton



Go to the bank, address the windows, tell the cashier that you'd like to open an account and hand over the bag of change. Ring the doorbell, press it again and use the chewing gum on the catch. Go through and use the screwdriver on the keyhole (top left white pixel) of the filing cabinet once for the bank file and once again for the blueprint.

Collect the mushroom from the Hill and head back to the docks at Badside and you will hitch a ride to the monster's cage. Pick up the two pieces of vine and the stick, straw and grating. Combine the stick and one piece of vine, select the bow (and click at the top of the screen) to grapple the resulting hook in the girders above.

Spray the monster with the perfume, swing across and feed the plant the hotdog. Swap eggs, swing back, attach the second piece of vine to the metal hook and escape down the sewers.

Use the blueprint to locate the vault, and place the mushroom against the wall and let the fly loose to blast your way in. Use the flour, take the bonds from the deposit boxes to the left and head back through the sewers to The Hill.

FASCINATION

I am stuck in Lou Dale's kitchen. I have mixed the bleach and the other 2 chemicals in the basin but I keep gassing myself.

Michael McNulty
Liverpool



LEVEL 1 Tips This level should be fairly easy. Try not to get caught at the edges of the screen in the meteor storms. The second of the three bosses can be avoided by sitting in the bottom right hand corner of the screen, but watch out for homing bullets. The big, fast moving meteors near the end should be dodged rather than shot – unless you have a very powerful weapon.

LEVEL 2 Tips The buildings with the radiation symbol cause a chain reaction explosion when blown up, destroying all other active buildings on the screen. Watch out for bonus buildings and hidden bonuses.

At the large rotating building near the end, shoot the surrounding ground guns first to give yourself something with a vague semblance to a chance. There are trap doors which open and fire homing missiles – try to destroy these, but bear in mind that they're only vulnerable when they're open.

Flashing red lines indicate which buildings cannot be flown over – and this is a rule that applies throughout the rest of the game as well. There is also a special dome with a cross in the centre – shoot enough of these to produce a special laser beam weapon power up. This laser will destroy everything it touches, but has a limited life span – use it in short bursts. This laser is available on levels two, four and five.

LEVEL 3 Tips Learn which way the tunnels turn and twist. Do not sit too near the bottom of the screen as aliens come up from below you. Watch the aliens flying up the screen carefully, as they know which twists are in the tunnel ahead and will swerve to follow them – giving you extra warning. The ships that track your horizontal movements can be 'led' into the sides of the tunnels. Try to get below these aliens as they will then fly off the top of the screen.

LEVEL 4 Tips The long downward pointing guns cause a chain reaction explosion. Watch out for the small ships which home in on you – with practice they can be dodged and will not persist for too long. Watch out for bonus buildings and hidden bonuses. The large guardian gun at the end has a protective dome which cannot be penetrated – you can only hit the gun when the dome opens.

LEVEL 5 Tips The chimneys which throw up flames cause a chain reaction explosion. Shoot the spinning spheres on the power stations to cut power to ground buildings. The lights go out, and ground guns will stop working until power comes back on line.

With no power, the ground guns are easy targets but make sure to watch out for bonus buildings, and hidden bonuses.

Use the Options!

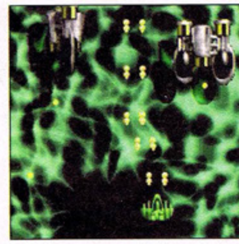
The options are there to allow you to customise the game's difficulty. If you do not like the mission objectives you can simply turn them off. There is also an easy setting, which should serve to help most if they are struggling. If this is still not enough then take the 'customise options' option. This means you can increase the starting number of shields even more, and make various other changes.

There is an 'auto weapon select' option which automatically chooses your most powerful current weapon. Normally when you are hit, you lose one power level from the current weapon, but the 'shield loss effect on gun' will prevent this.

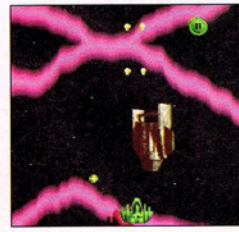
You never lose a weapon entirely during a level, so remember you can toggle between them all. You can toggle through all available weapons when the game's paused too.

So there you have it. Our (and I dare say yours too) thanks go to Anthony Fenton-Jones and Matt Waters from WeatherMine for providing us with this comprehensive list of hints and tips. Now all that's left to do is kick some alien botty.

Continued overleaf ➡



Eek! Here come a couple of baddies and they don't look happy. Time to move.



Another baddie. Normally, this would be a problem but not now with our top tips.



My favourite port. I went here for my holidays once. Oh no, come to think of it, that was Port Talbot. It's an easy mistake to make if you've ever seen Port Talbot.

Put on your surgeon's mask and turn on the tap. Take the dish cloth and wet it with water. Now go to the cupboards and find the basin. Get the bottle of bleach and pour it into the basin. Use the basin to mix the bleach with the washing powder and caustic soda. Open the service hatch as wide as you can and place the basin in it. Block the space with the help of the wet dish cloth.

ZOOL 2

I am completely stuck on this so could you give me some cheats?

David Tittensor
Newcastle-Under-Lyme

At the intro which says "PRESS FIRE FOR OPTIONS" type in one of these words for some extra help:

CREAMOLA	*10 lives*
VISION	*20 lives*
KICKASS	*Re-usable smart bombs*
NAPOLEAN	*Bonus level entry stage*
ALCENTO	*Increase percentage to 99%*
OLDENEMY	*Stops the clock*
HISSTERIA	*Start on level four.*
TOUGHGUY	*Invincibility (except electric and spiked walls)*



If you're stuck on Zool 2, don't worry about it, just type in the code for the next level and pretend you've worked your way through it. It's what we do.

Continued overleaf ➡



ABOVE: Type in the password and get yourself loads of balls, mate.



BELOW: When your mate gets the high score, simply type WIPEOUT.





SLAM TILT

Stefan Svendsen from sunny Grenaa in Denmark knows a thing or two about pinball, well, *Slam Tilt* at least...

When a table is loaded, you can type LONGPLAY to get yourself five balls instead of three.
But, of course, you can also type one of these:
KOTTEN
WHIPLASH
CHEAT
COW
LIQUID
KLAUS
IAIN
DANIEL
BARRY
STEWART
These cheats don't have any noticeable effect on the game but they do reveal a little about the programmers.
PS: The LONGPLAY thing also works on the *AF*CD2.

And staying with *Slam Tilt*, we have some more tip, tip, tippety bits from Mark B in Wellingborough:

Load up the game as normal and select the table you wish to play on. Before one of the F keys is pressed to select the number of players, key these words in:
SMILE – Turns the ball into a smiley face.
RADIOACTIVE – Changes the table colour scheme (there are three to choose from).
STONED – Makes the ball move crazily!
WIPEOUT – Resets the high scores.
ARCADE ACTION – Activate video sequences.



ABOVE: That'll be London – and it looks like I'm heading for Big Ben.



RIGHT: Skilful manipulation of the controls will ensure I fly harmlessly past Big Ben.

FRONTIER

Here's a complicated cheat (from Darren Stanney in Lincoln), that doesn't actually do an awful lot and it takes bloody ages but if you've got the game then you'll appreciate having something different to do. You know what I mean...

If you pick up packages and passengers with different destination systems then hyperspace to a system (A), in which you have to deliver three or more things. Dock at an orbital station and leave straight away. Pause the game and set the destination for another system (B), where you have to deliver a package. Make sure the hyperspace signal is lit, go to the passenger roster as soon as you deliver the last thing to system (A). Press H to hyperspace to system (B). You will then deliver all the packages to system (B). You can then skip to another system to deliver packages there and so on. All deliveries will be classed as arrived on the date you arrived at the space station in system (A) and not at the current date.

There you go. Hope you can follow Darren's instructions better than I can. Hi ho.

INDIANA JONES AND THE LAST CRUSADE.

I've been really enjoying this game but am completely stuck in the castle, what on earth do I do?

Joanna Hicks
London

Enter castle, knock out butler, head north. Find the drunken soldier and talk nicely to him. Offer to get him another drink, get his stein, head to the room with the burning fire plus the keg of beer, use stein with the spigot, then use stein with hot coals, then use the stein with the spigot, once the steam from the fire has finished, get roast boar and exit room.

Head back to the entrance of the castle, give the stein to the first guard and enter door. Get the servant's uniform and exit. Find the room nearby that's got a fireplace, push the first statue which will show a hidden passage. Close the passage and exit the room. Tell the second guard that you're selling fine leather jackets and that you have authorisation. Sell him the jacket for 15 marks. Walk up the steps into the room with the chest in it. Open and look in chest to find another 50 marks. Wear the servant's uniform and leave, give the painting found in Henry's house to guard three, go east and you'll find another room with a small chest in it. Open and look in the chest and get the uniform. Examine the uniform to find a key. Change back into Indy clothes and head back to where you found the servant's uniform. Now use the brass key in the clothes lock to pick up the grey uniform.

Exit here and go back upstairs, change into grey uniform, enter room one, when you run into the fourth guard fight him. There's a first aid kit to the south of here. Exit room after applying the first aid and head upstairs. You need to insult him to get past so keep doing it until he lets you pass then go through door one and give the roast boar to the dog. Take the trophy and open the drawer to get the pass. Change back to Indy clothes and head downstairs to the kitchen. Fill the trophy with beer from the keg, change back into the grey uniform, go upstairs and give the trophy to Bif, he will then hit himself with the trophy and you need to punch him once to finish him off.

Punch guard two, look through the window and get the silver key which is hanging from the candelabra. Use the key on door three, the alarm goes off, enter room, if the room has a cabinet in it, open the cabinet to get the 75 marks or look to the left or right to find the 75 marks. Exit the room and give the Grail Diary to Vogel.

When you're tied to the chair with Henry, keep pushing and pulling the chairs until you are under the suit of armour, push the suit and you should be free. Push the statue on the left of the fireplace and enter the hidden passage. You should now be outside where you can walk over to the motorcycle and sidecar. Get in and use it.

LEND A HAND

If you're having trouble with a particular game or have a solution to a question printed in the magazine, don't keep it to yourself, write it down or send it in on a disk and we'll do our best to print it.

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PD select

Whether you're a fan of role playing games, a budding artist, or you just adore Star Trek – Robert Polding has something for you.







ABOVE: This picture doesn't really tell you much about *Q:Whiz* but it looks very nice.

RIGHT: If you decide to write your own quiz just click on 'make questions'.

Q:WHIZ

By .... *Paul Nordovics*
Ware .... *Licenceware*
PD Library .... *F1 Software*
No of Disks .... *Two*
Price *£4.99*

Quiz games are often regarded as boring and undistinguished, but as *Pic-It* proved in *AF*86 they can be excellent. *Q:Whiz* lacks the snazzy pictures which made Pic-It so impressive, but it is a rather fast paced fun quiz. You have to be quick witted to play this game because you only get a few seconds to answer each question. The interface is based on those quiz games you see in Pubs (minus the cash prizes!), with four answers to choose from for each question. When you get a question right you gain ten points but you lose ten if you fail. This makes the game a bit more of a challenge because whenever I got a few questions right I invariably lost all the points through wrong ones.

There are 800 questions included, with subjects ranging from Movies to Formula 1, and when you've answered all these you can create your own quiz through the editor– making the questions as serious or as stupid as you want. I honestly couldn't crash or find any faults in the programme, so congratulations to the author.

This release is compatible with any 1Mb+ machine and even works at

Continued overleaf ➡

PD selection of the month

THUNDERDAWN

By .... *Andy Campbell*
Ware .... *Licenceware*
PD Library .... *SeaSoft*
No of Disks .... *One*
Price *£2.95*

Role playing games have been taken over by the *Doom* clones and therefore many of the PD role players are being stamped into history. Nevertheless, they do still keep appearing and hopefully they'll do well.

The author of *ThunderDawn* makes it very clear in his text document that this is not an attempt at a *Doom* clone. Instead it's more of a *Dungeon Master* type game (although the author denies any link with this genre too).

The aim of the game is to collect some blood crystals and kill lots of really big ugly monsters (or something like that). Basically, you go into 'portals', run around killing enemies and then attempt to get out (without dying) by collecting a key and a crystal.

The game is played from a first-person perspective, with the keys to control movement and the mouse to control your weapons. The graphics are very good – but don't expect *Alien Breed 3D II* – and the sound works very well in building up the atmosphere.

The game can become particularly tense when you become trapped in a corner by a huge two headed monster and you run out of arrows! There are many portals that lead into different worlds and, as a result, the game is huge. It becomes very addictive as you try to find ways to complete each level.

If you're in to role playing adventure combined with a good slice of action then this is a great way to pass your time.



It all seems to have gone very green in here and you need to get through that wall.



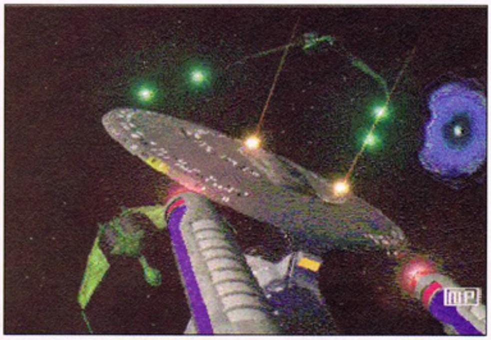


ABOVE: You need to destroy the green-eyed monster.

LEFT: The red glow tells me that death is very near.



That shadowy thing to the left of the screen is an evil ghoul and he's just about to leap towards me.



FINAL FRONTIER: The pictures are just a small part of the whole Star Trek experience.







FINAL FRONTIER: There is also a selection of articles, stories and ads – but the pictures are very nice.

← full speed on an A500. If you want an excellent game that is better than the versions down your local (and a lot cheaper) then you should definitely buy this.

FINAL FRONTIER 9

By ....*Simon Plumbe*
Ware ....*Licenceware*
PD Library................................*SeaSoft*
No of Disks................................*Three*
Price *£4.50*

The *Final Frontier* series is a selection of Star Trek based disk magazines and this one focuses on the 'Generations' film. The first thing that makes this disk so special is the interface. It uses a custom system, called 'LCARS', which is based on the computer system from the Star Trek series. All the sounds are digitised which makes it very atmospheric and there is also a choice of music to play.

The articles are presented in ASCII format, and feature all the usual tricks, such as large lettering using different characters. There are an enormous selection of articles to read, ranging from editorial to full stories to classified ads. Many of the articles on the disk are for real fans of the series because they become quite technical, but anyone can enjoy the pictures. which range from digitised to raytraced and all load at a reasonable speed.

The system spans over three disks and unfortunately there is no hard disk installer, which would have made access much faster and easier. But if you're a Star Trek fan then buy this, and if you're not then buy it anyway simply because it's an incredible piece of programming and great fun.

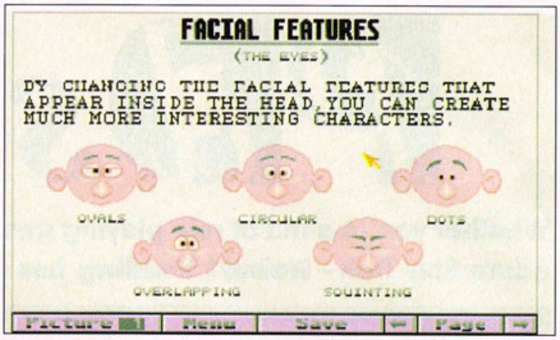
TI ISSUE 14

By ....*Richard Bannister*
Ware ....*PD*
PD Library ....*eaSoft*
No of Disks ....*One*
Price *£2.50*

It seems that this month we've gone disk magazine crazy and this one is for all the MED users. Produced by the MED User Group, it has music and reviews galore. The interface looks somewhat simplistic in comparison to the others this month, because it simply uses a text viewer and a quite boring looking system. But there is a choice between two quite good pieces of music, and they use a new version of the *OctaMED Player* program (that is included in the release).

This issue focuses on the new *SoundStudio* package (which was in demo form on the July CD), and gives an insight into the new features. There is news, reviews and information for all MED users and also discussion and ideas for making your own music. There are no graphics – a screenshot of Soundstudio would have helped with the overall presentation – and there was also a problem with the Picasso-II board and the text viewer, which it attempted to use disastrously.

This is a good disk for users of *OctaMED* – there are a couple of nice tracks included and the latest music player – so the disk is reasonable value.



GRAFIX: Aren't they all cute? It's a shame that something can't be done about those ears though.

GRAFIX

By ....*D. Sharples*
Ware ....*Licenceware*
PD Library ....*F1 Software*
No of Disks ....*Two*
Price............*£6.99p per disk + 75p p&p*

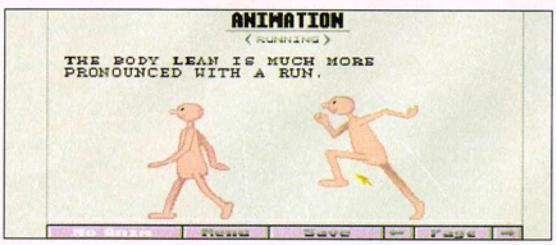
This is an F1 Gold Production (the first in seven months) which means it has been seen as a release of incredible quality and costs £6.99. The programme is a port from a commercial Atari ST package that was a big hit, and it has been improved for the Amiga.

Grafix is an Art Tutor that requires no knowledge whatsoever, and covers areas such as drawing people, animals, perspective and dithering, animation. The presentation is excellent, with large colourful graphics and text and either diagrams or animation to show the method. You can also export any of the examples into an art package, such as *DPaint*,

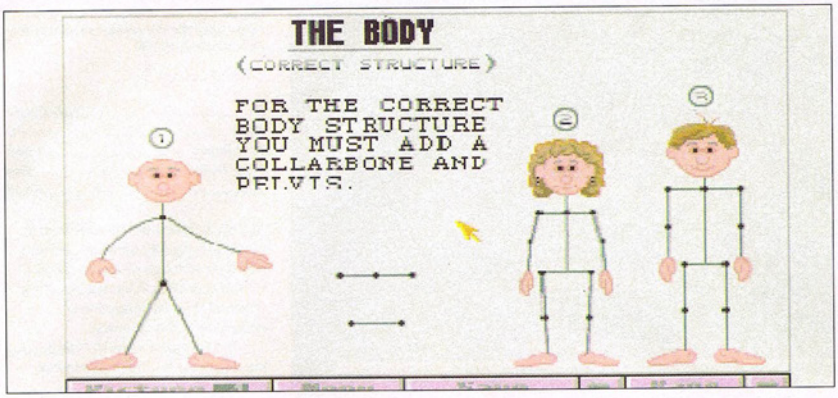


TI ISSUE 14: Choose from a selection of reviews and samples to listen to.

TI ISSUE 14: TI is designed specifically for those of you interested in *OctaMED* and issue 14 concentrates on the new *Soundstudio*.

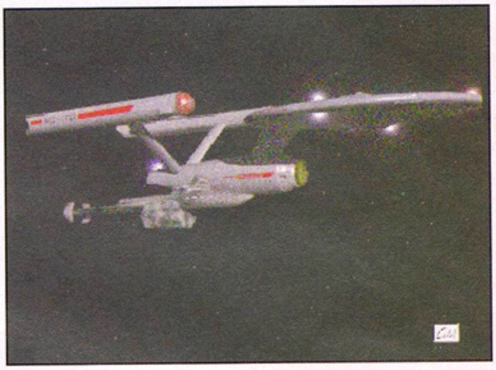


GRAFIX: Quick! Aaah! Watch out! That burning arrow is just about to shoot into that poor man's leg. I think anyone's leaning would be more pronounced in that situation.



GRAFIX: The addition of a collarbone and pelvis seems to coincide with the growth of curly ginger hair.

ILLUSIONS: It really is quite impressive how quickly and smoothly the images scroll down the screen.



so you can look at them and play.

The package also comes complete with a 42 page manual which is printed reasonably well and comes in a smart plastic wallet.

These learning methods work very well, the diagrams are all very clear and the animations are excellent.

Although it may be somewhat basic for established artists, the quality of the program easily justifies the price tag – it's a superb educational package that anyone can enjoy.

ILLUSIONS 3

By	*Infinite Frontiers*
Ware	*PD*
PD Library	*SeaSoft*
No of Disks	*Two*
Price	*£3.50*

This slideshow was produced by the same people as *Holodeck 9* which was reviewed last month. But the range of subjects covered in *Illusions 3* is very different.

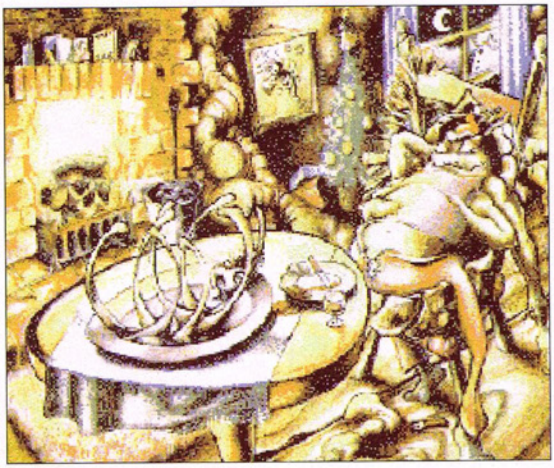
The images range from rendered Star Trek pictures to stunning portraits and cartoons. The quality is incredible and each image scrolls smoothly on the screen. The pictures load very quickly, thanks to the Infinite Frontiers loading system, and there is an excellent atmospheric track playing.

The presentation of the slideshow is very similar to the Holodeck disk, using Star Trek fonts to make the presentation more convincing, and having adverts at the end for other Infinite Frontiers products.

Slideshows are often seen as boring and pointless, but when they represent such stunning art they are an essential parts of anyone's PD collection, although after several views you may use them more to impress your friends than to look at yourself.

These disks come highly recommended for all who enjoy art

Continued overleaf ➡



ILLUSIONS: That funny looking insect thing seems to have had too a little too much to eat and fallen asleep by the fire – or something. This pic was created by Jason Brown.



ILLUSIONS: I don't think she appeared in Star Trek so I'm assuming this is one of the other range of subjects. Another pic created by Jason Brown.



BUGS: There is a wide range of options to choose from this introductory page. I especially like the pointer shaped in the style of a bony hand.

← and like to be reassured of the graphics capability of their machine (that's all of us I think!).

CLASSACTION 2.8

By	*Gasmi Salim*
Ware	*Shareware*
PD Library	*Arrow PD*
No of Disks	*One*
Price	*99p per disk + 70p p&p*

This programme adds actions to files without icons in a similar way to the excellent *NewIcons* package. The 'Show all files' feature of Workbench is a superb one, but the files without icons can't be easily identified and this utility allows you to assign actions for specific filetypes. For example with a GIF image you could launch your favourite viewer when you click on a GIF file. This feature means hard disk users won't have to resort to directory utilities all the time, instead they can use their Workbench as a filemanager.

The programme is really useful for handling archives, because when you click on an archive you can execute the archiver to either list or extract – this is especially useful when using the Aminet disks. The features of this program will not affect people who are using the *NewIcons* system, because it already includes these functions through the DefIcons utility.

This is a Shareware package, and if you decide you like it then a mere $10 (US) is charged for registration of the latest version.

BUG ISSUE 3

By	*Neil Wright*
Ware	*PD*
PD Library	*SeaSoft*
No of Disks	*One*
Price	*£3.50*

Blitz Basic is one of the easiest ways to produce quality software, without having knowledge of Assembler and C. The user base is increasing all the time and this disk magazine is dedicated to the language.

The magazine aims to "teach you, the user, how to code commercial quality games, demos, and applications". The mouse driven interface is quite basic but it works very well and there's some nice background music. There are articles for beginners and experts alike, and also some adverts for Blitz-related disks, with graphics and sounds which can be used in programs.

There is also a directory full of example source code and one full of projects by the Blitz User Group, which allows you to see what is being talked about in the magazine.

The disk could have benefited greatly from the addition of some graphics and the ability to play other music while viewing, but the examples mean you can see the code in action and that makes up in some ways for the lack of graphics.

For total beginners the articles may be a bit too complex, because some basic knowledge is needed – so don't expect to become an expert just with this. But for established Blitz users this disk is very useful and it illustrates very well that the language has great support and potential.

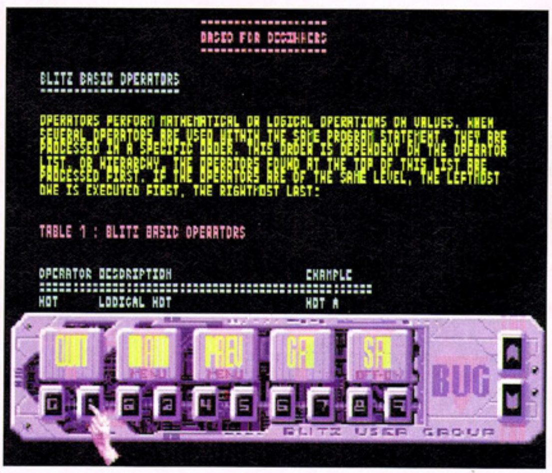
WHERE TO GET THE DISKS IN PD SELECT THIS MONTH

ARROW PD
PO Box 7
Dover
Kent, CT15 4AP

SEASOFT
Unit 3
Minster Court
Courtwick Lane
Littlehampton
West Sussex, BN17 7RN
☎ 01903 850378

F1 SOFTWARE
31 Wellington Road
Exeter
Devon, EX2 9DU
☎ 01392 493580

Other good PD libraries



BUGS: This is Basic for Beginners and we've started with a list of *Blitz Basic* operators. It maybe be aimed at beginners but it still looks very complicated to me.

TOP 10 PUBLIC DOMAIN TITLES

Top 10 courtesy of:

SEASOFT
Unit 3, Minster Court
Courtwick Lane
Littlehampton
West Sussex BN17 7RN

1. Bug Issue 3
2. Tribute to Rob Baxter
3. Magic Workbench 2.0E
4. Climbing Up
5. Hot Mods Vol. 1
6. Beasties
7. Assasins Games Vol. 261
8. MidiCraft No. 10
9. Guide to Blitz
10. Casino

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MegaMouse 400 ....£9.95
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A500 512K Ram Board w/o clock £15.00
A500+ 1Mb Ram Board w/o clock......£20.00
A600 1Mb Ram Board w/o clock £20.00
A600 1Mb Ram Board with clock £30.00
A1200 2Mb Ram Board with clock......£69.95
A1200 4Mb Ram Board with clock......£79.95
A1200 8Mb Ram Board with clock ...£119.95
FPU 33MHz £33.00

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AlfaPower Hard Drive controller A500 ...£99
AT-Bus Hard Drive controller A2000 ......£69
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FOR AMIGA 1500/2000/4000

Features:

- 10Mbit Ethernetcard for A2000/3000/4000
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including colourful labels

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Alfapower-0 controller 0Mb £99.00
Alfapower-120 120Mb hard drive ...£159.00
Alfapower-250 250Mb hard drive ...£179.00
Alfapower-420 420Mb hard drive ...£199.00
Alfapower-540 540Mb
hard drive £209.00
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hard drive £229.00
Alfapower-1.0G 1.0Gig
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Alfapower-1.2G 1.2Gig hard drive ...£269.00

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IDE-1.2G 1.2Gig hard drive £179
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+ Install software £15.00
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Optical Mouse Mat £5.00
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Quad Speed CD Rom for A600/A1200 £149
(inc CD32 emulation)
Quad Speed CD Rom
for A1500/A2000/
A4000 ....£109

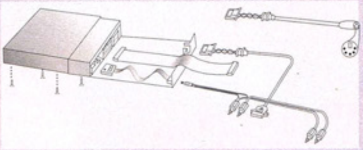


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Grab images with your camcorder including S-VHS...

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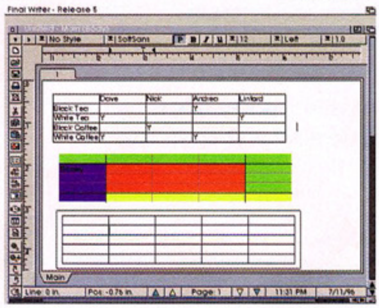
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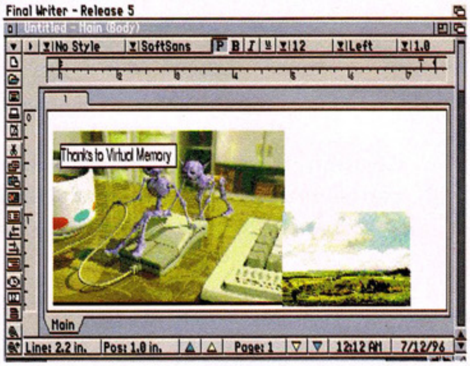
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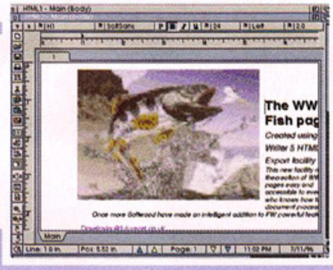
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AF SERIOUS







Could Softwood's *Final Writer* possibly get any better? **David Taylor** looks at the latest version... p63

AMIGA FORMAT

HIGH STANDARDS



Graeme Sandiford

Well there seems to be plenty of really good quality products floating around the *Amiga Format* office at the moment which is pleasantly surprising.

Monument Designer, the German's favourite professional video titling package for several years, looks and works more like a DTP program than a traditional titler and the latest version of *Final Writer* is now much more than just a word processing package with the ability to create tables.

The 68060 accelerator means that A4000 owners can now carry out power-hungry tasks with relative ease and the Apollo board is amazingly fast. And don't forget to take a look at the CD-ROM pages, where we've got all the latest CD's up for review.

REVIEWS

58 MONUMENT DESIGNER
We looked at German born ClariSSA Pro last month and **Graeme Sandiford** was very impressed. This month it's the turn of the video titling package, *Monument Designer*, also from ProDAD, to go under the spotlight.

63 FINAL WRITER 5
There's a host of new features in the latest release from Softwood including a new export option for HTML documents, exportation of RTF documents and the ability to create tables. **David Taylor** decides whether this really is the final *Writer* or whether there is still some room for improvement.

68 GVP 68060
If you use your Amiga 4000 for processor intensive tasks like rendering then you are always going to be on the look-out for powerful accelerator boards. The 50 MHz 68060 from GVP also comes with a top-flight SCSI processor, providing you with possibly the fastest Amiga ever seen.

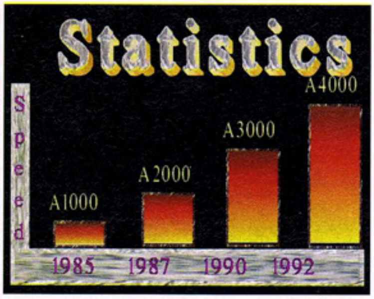
71 APOLLO 1260
The Apollo range has generally always been a lot cheaper than other accelerator boards but at nearly £600 the Apollo 1260 is very expensive.
Is it worth the extra money or are there other boards, equally priced but with better features? **David Taylor** finds out.

72 CD-ROM ROUND UP
Ben Vost hand picks the best CD-ROMs that are currently on the market and then gives them all a thorough once-over.

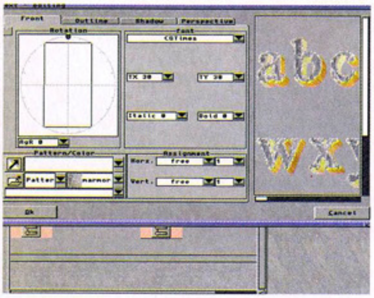
Monument Designer

AMIGA GOLD FORMAT

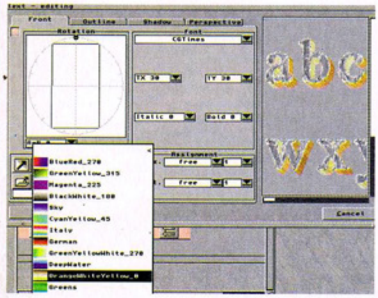
Germany's favourite titling program has finally been converted into English and Graeme Sandiford took the opportunity to give it the once over.



This is a relatively simple example of what the program can do and its just 256 colours.



Text is usually the focal point of most titling projects and the program has plenty of text effects.



Thumbnails are provided so that you know what an image looks like before you apply it to an object.

After reviewing the excellent ClariSSA last issue, you can imagine how pleased we were to receive a copy of longtime German favourite and stablemate of *ClariSSA* – *Monument Designer*. Formally known as *Monument Titler*, this program has been Germany's most popular titling program for a few years and it has also enjoyed immense success as part of a powerful double-act with the Neptun series of Genlocks.

The program has finally been converted to English so we can see how good it really is. At over £170 Monument Designer is clearly aimed at the professional and high end of the "keen-amateur" markets. As well as being designed to work with the Neptun Genlock, ProDAD have made sure that *Monument* works effectively with ClariSSA. To that end *Monument Designer*, like most of ProDAD's current range of software products, has full support for the SSA (Super Smooth Animation) format.

STRONG BUT SIMPLE

Despite its high target-market, ProDAD has not lost sight of their goal of professional software being both powerful and, more importantly, usable. As a result, the program is not over-laden with unnecessary or inaccessible features. Instead, the program strikes a fine balance between possessing features that are both powerful and useful and keeping the interface simple enough so that you can concentrate on using the tools rather than finding them.

Like *ClariSSA*, *Monument's* interface is based on a window system, although some of them will lock out others if they are opened. The interface has an eye-pleasing MUI look to it and can be configured to your needs and machine's abilities. This can be achieved from within the program itself or, as with *ClariSSA*, through the external SSA Pref tool.

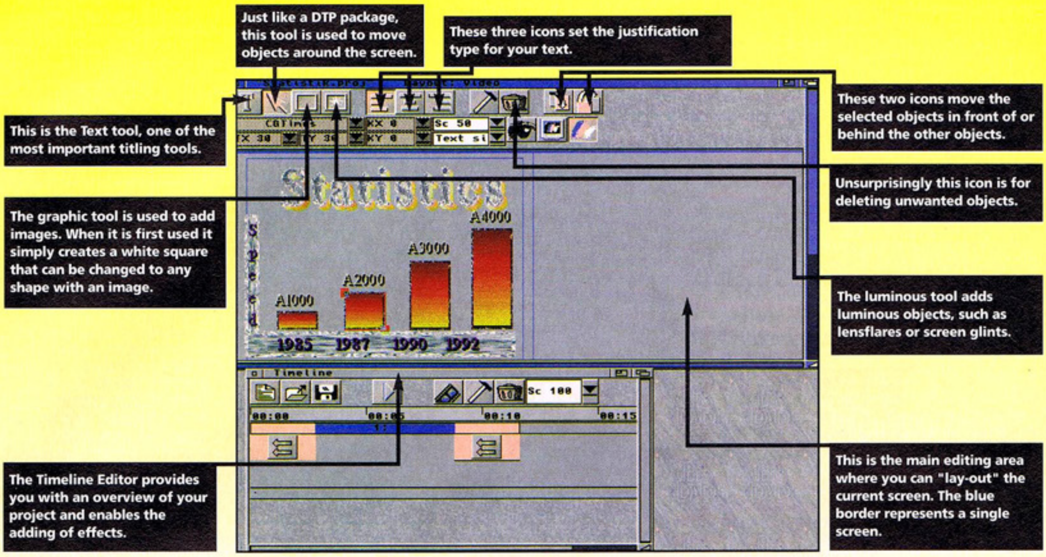
As well as enabling you to set the screenmode for the program, it can also be used to access the program's virtual memory settings. Unlike most virtual memory programs, SSA virtual memory doesn't require an MMU and will quite happily, if somewhat slowly, work with an 020 processor. The program's virtual memory function enables you to edit title sequences that would otherwise be too large. However, thanks to the SSA animation format, the finished animations can be played back from disk as well.

QUALITY

Although artistic flair and a fair amount of knowledge are crucial to producing effective and attractive titling sequences, the look of the finished production will depend mostly on the quality of the program's output. In order to achieve this quality, *Monument Designer* works in 32-bit, that's 24-bits and a 8-bit alpha channel. This means that if you have a whizzy 24-bit graphics card your titles can be displayed in all their true-colour glory. The program will also convert down these images so that they can be displayed on AGA and ECS Amiga's and the results, particularly on AGA machines, can be quite impressive. You also have the option of exporting the results as RGB images, ILBM or SSA animations.

Monument Designer's main interface looks and works more like a DTP package than a traditional titler. The main window provides you with an overview of your project and enables you to position and otherwise modify the elements of your project on an individual basis. When you are "laying-out" a project the default view is a preview which will stop things from

FINDING YOUR WAY AROUND



being slowed down by constant re-rendering. Unlike most other programs of its kind, *Monument Designer* is object-orientated so that just because you place one image in a particular position it doesn't have to remain there forever. You can move each element whether it is text, an image or an effect around the screen and even move them backward or forward as you would in a DTP package.

RENDERING

Once you have things arranged the way you want you can then render the sequence. This can take quite a long time as there are a lot of calculations that need to be made before it is played back. Fortunately the playback window has an option to speed this process up. You are given control over the animation's resolution, colour-mode and quality. Another feature that is found in this window that is also useful is the memory defragmentation button which will also help speed up the play back of your animation.

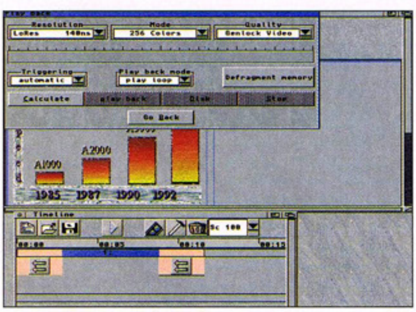
There are a variety of tools and object types to choose from and most are available as icons. When double-clicked on, each will bring up an appropriate modification requestor which provides several methods of adjustments.

The most important element in most title sequences is the text and the program is capable of loading scalable Compugraphic fonts, so you can resize your text without loss of quality. For added control you can even adjust the horizontal and vertical size of your text separately as well as adjust the orientation of the characters, their outline, add a drop shadow or even create a perspective effect which makes them look 3-dimensional.

It is also possible to modify the appearance of the face of your text by adding a texture (an IFF image) or a gradient. To help you create the latter the program has a built-in gradient designer. You can use it to create two or three-colour gradients and adjust their angle by "hand".

The same options are available for graphics objects as well. However there is a third type of object called luminous objects. They are mainly for light effects such as glints and lens flares and their shapes can be based on the existing alpha channels.

By combining the wide range of tools and effects it's easy to create effective title sequences. Likewise animating your titles is also a breeze. *Monument Designer* has it all – a wide variety of powerful tools and a simple interface that should meet the needs of experts and yet remain accessible enough for beginners to use. If you are looking for a professional quality titling package then this is it.



When it comes to playing back your sequences *Monument Designer* has loads of options.

MONUMENT DESIGNER

DISTRIBUTOR
White Knight Technology
01920 822321

PRICE
£179

SYSTEM REQUIREMENTS
A 68020 processor, hard disk 2Mb Chip RAM and 4Mb Fast RAM.

SPEED ●●●●
Even with an '030, you'll find yourself waiting around for complicated sequences to render – however, it's worth the wait.

MANUAL ●●
While the contents are actually useful its poor structure means you have to read through the whole thing.

ACCESSIBILITY ●●●●
Once you stop thinking like a paint package-user and start thinking like a DTP-er, it's a piece of cake.

FEATURES ●●●●●
The only thing that I can think of that's missing is support for anim brushes, but everything else is there.

VALUE ●●●●
Although it costs nearly £200 – it's a professional quality product.

"This is the Amiga's premier titling package"

91%

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AGA003 WORKBENCH HACK hack/toy/blanker etc
AGA006 NEW SUPER KILLER recognises & kills over 316 types of virus. Must for all A1200 owners
AGA007 MINDWARP very first demo for the A1200
AGA011 SLEEPLESS NIGHT 3
AGA012 PLANET GROOVE Super A1200 Demos
AGA013 MOTOR INVADER 2 (2 disks) Brilliant INVADER game
AGA015 POINT OF SCALE Great A1200 only demos
AGA016 CHROMAS - Fairly good demo.
AGA017 WORLD OF MANGA (4 disks) magnificent Japanese comic slide show. Recommended
AGA021 MAGIC WORKBENCH Improve the look of your WB & add some functions to your WB. Really BRILLIANT
AGA022 WB 3 UTILITIES loads of WB 3 only utilities
AGA023 U-CHESS the best chess game program so far but requires 4 megabytes. Brilliant graphics
AGA024 WORKBENCH 3 SCREEN Great backdrop

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AGA091 A1200 FIX DISK 2 COLLECTION 2
AGA094 RELOCKIT V1.4a latest. run A500 SOFTWARE
AGA306 A1200 FIX DISK VOL 3 (New July 95) All disks above are designed to make any older A500-A600 Amiga programs/games etc run on your A1200/A4000
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AGA103 BLACK BOARD AGA decent Image processor
AGA105 QUICK GRAB AGA - AGA screen grabs
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AGA135 AGA UTIL V3 &4 (2) more of above
AGA137 MULTIBOOT - 4 different versions A500 EMU
AGA138 OFFICIAL WORKBENCH 3 HARD DRIVE INSTALLER
AGA139 WB3 HARD DISK PREF & INSTALLER installing
AGA140 CROSS DOS PLUS v5.1 read/write PC files
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AGA144 SPEAK & SPELL - educational software for kids
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AGA194 BIG TIME SENSUAL (2 disks) SPACE BALL 2
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AGA254 DIRT AGA Brilliant 256 colour effects
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AGA257 MINOMIST RAVE great rave music
AGA258 OXYGENE Fantastic demo
AGA259 INTEL-OUT Another very good demo
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Final Writer 5

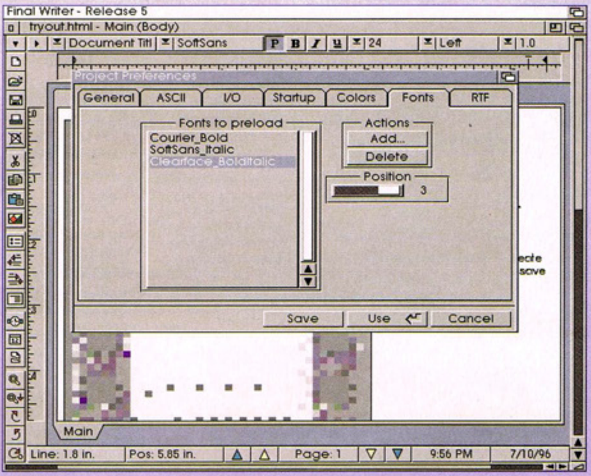
Can the market continue to support updates? Cynical cash-ins or real opportunities for users to make their software work for them? David Taylor finds out.

Final Writer 4 was considered a fairly minor update by some users. It was a remarkably powerful program, but there were still some areas that people wanted expanding. This latest version actually supplies a range of very useful new features. Features that you could soon wonder how you ever did without. Of these, there are four that stand out as essentials: a new export option for HTML documents, the export of RTF documents, datatype support and the creation of tables.

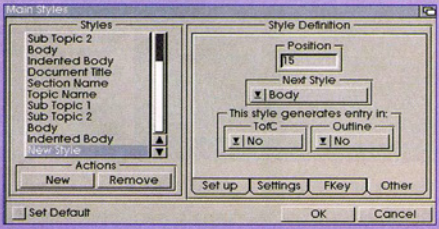
ONE FOR THE WEB

HTML is the form of document that the majority of World Wide Web pages consist of. Essentially, it uses codes, which are simply text instructions, that inform the interpreter (that is the browser you use to view WWW pages) where pictures are placed and what style the text is. However, not many people have actually bothered to learn the HTML codes, because even if you do know the codes, it is still a real pain to layout pages. On many other platforms there are custom applications, behaving like DTP packages, that allow their design. On the Amiga though, the only real options are a selection of shareware programs.

Recently the idea of incorporating the export of HTML from standard document processors has appeared on the PC and Softwood have made the very intelligent decision to create this feature for *Final Writer*. To create a Web page all you have to do is design the page as you would any normal document and then export it as an HTML file. The program will save all the text and any related pictures in a directory named after the document. If the directory doesn't exist, it is created automatically.



There is now the option to pre-load fonts so they are instantly accessible every time you load the program.



The style sheets have been improved to include a next style option for automatically formatting documents as you type.

When you create the documents, it is necessary do a little work before you can get started. With a normal document, you could re-size the pictures after loading them into *Final Writer* but because the files are not embedded in HTML documents and the original pictures are called by the browser, re-sizing is not possible. You must decide on the image size and scale it before loading it in. You also have to make sure that you use an appropriate file format – WWW pages normally use only GIFs and JPEGs and some browsers, particularly PC ones, won't be able to load the Amiga native IFF.

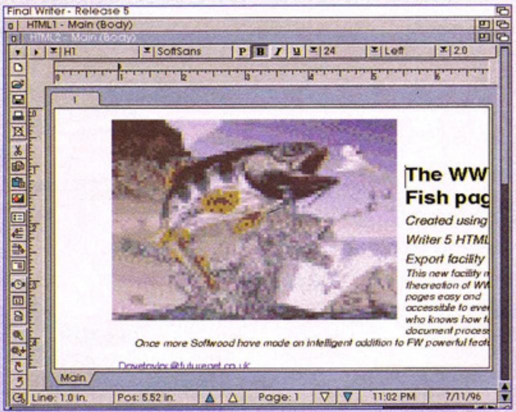
Bearing in mind these restrictions placed on the program by the WWW architecture, it seemed that *Final Writer* could do some impressive things. However, one thing to bear in mind is not to simply export the document as HTML, but also to keep a copy in *FW* format. *FW5* is not able to import HTML documents, so loading one back in doesn't get the beautiful page back, but a set of boring text codes!

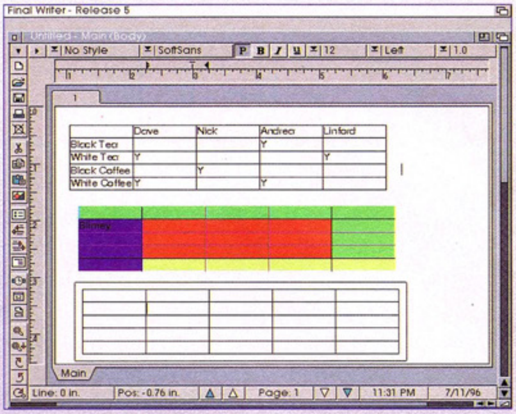
TEETHING PROBLEMS

Setting to work on a WWW page seemed simple enough, but I did encounter several problems. Firstly, there seemed to be a problem importing pictures at the correct size. I assumed this to be down to a difference in resolutions, but having checked that and the image size, it seems to be a quirk of the program. It does make designing the page more tricky though, especially as it seems that no matter what you do you can only have one line of text next to a picture.

The dreaded and perhaps traditional screen quirk of corrupted pictures, despite having the correct screen palette, made its usual appearance. More worrying though was the fact that although different styles appeared in the browser, I couldn't seem to export the all important HTML link code. Despite numerous attempts using both the style set up in the provided HTML document template and the manual instructions, it refused to export correctly.

Continued overleaf ➡





ABOVE: The picture loaded in for HTML format – note the blue text at the bottom, which didn't come out as a link, when it should have.

ABOVE RIGHT: Tables don't have to be solely a dual colour affair. All the colours of the rainbow are at your disposal.

THAT'S RICH

The Rich Text Format (RTF) is another export form that will allow you greater freedom when sharing your work with friends or colleagues.

Unlike the problems associated with circulating documents in ASCII, the completely plain and stripped text format, RTF can retain certain document attributes which other WPs can then load in so that your document will look much more like the original than it could by just converting bare text. Within the preferences you can set up a font remapping table that will allow you to decide which fonts will be used by the destination machine in place of the unique *Final Writer* ones. (No font is ever the same from platform to platform.) Should you try and save an RTF document containing fonts that haven't been set up in the remapping preferences, then *FW5* will offer to let you set it up there and then.

TABLE FOR EVERYONE

If you wanted to add some form of table to *FW* before, your only real option was to import some sort of picture or possibly try creating one freehand, which was ludicrous. Now a simple and accessible yet highly customisable, table function has been added. Sure, a simple grid table can be inserted instantly but with a few quick changes of the table preferences, you can decide whether or not the outer line should be visible or thicker than the other, what font is to be used where and what colour certain rows should be.

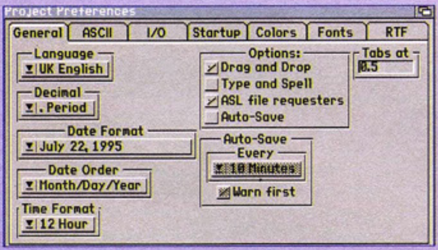
Different fonts can be assigned to different parts as can different colours. Because tables are there to illustrate your information in the most accessible and intuitive way possible, this flexibility means that you should have no problem ensuring your table gets the message across.

This is not a gimick. It may not allow you to change font every letter as you can in normal text or define every single line, but why would you want to in a table? Because you can define the number of columns and rows, you can use the tables for anything.

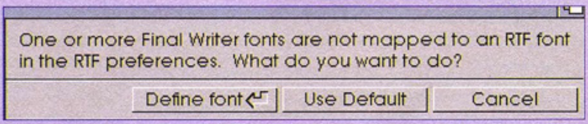
It would be nice if the table features were refined a little so that you could edit the size of cells after you had created the table and also if the table preferences for the table were accessible by double clicking on the table itself but even without these additions this comes out as the most important addition to *Final Writer*.

MINOR ADDITIONS

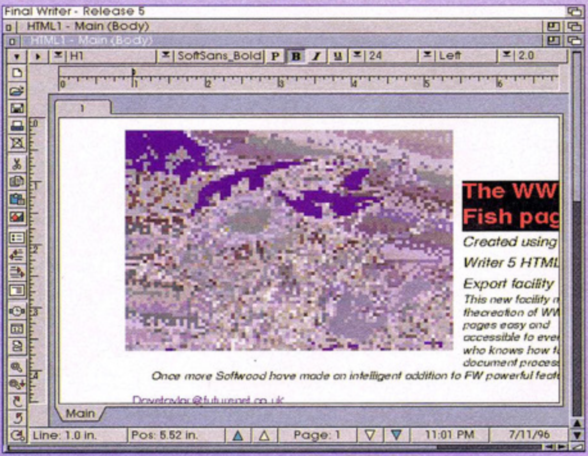
There have been a lot of smaller changes made to the package. You can



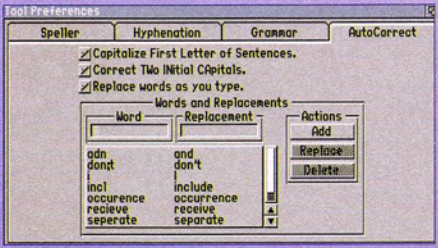
ABOVE: ASL requestors are now an option too, probably because of comments made.



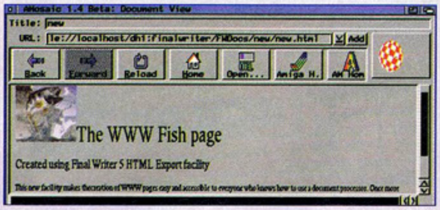
Exporting RTF without setting up font remapping? *FW5* will notice and tell you.



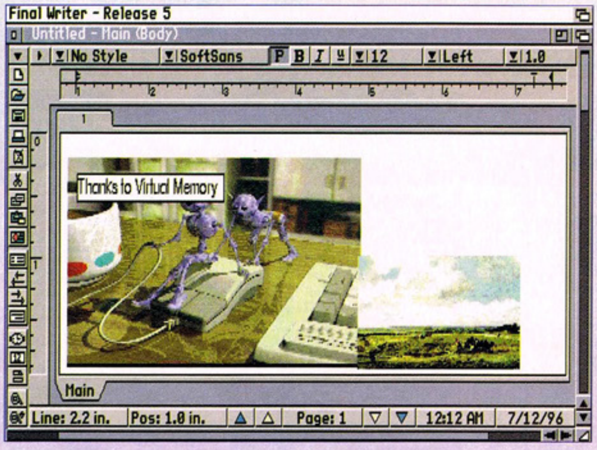
RIGHT: Hooray! Screen corruption of colours. Ah, what would a program be without it.



Auto-correction is a much more useful feature than grammar correction and includes the two initial caps correction.



The HTML export works to a certain extent, but isn't as flexible as it could be.



Virtual Memory seems stable enough to work with *Final Writer* so larger pictures can be used.

now use document templates to start a new document so that it has certain pre determined styles and inclusions, such as letterheads. New documents from templates appear as Untitled instead of as the name of the template so that you don't accidentally overwrite the template with the document itself (templates are essentially bare documents). You can however over-write templates by choosing the templates name as I did when using HTML. The templates should be automatically read-only by the program unless changes are confirmed with a warning that it is a template.

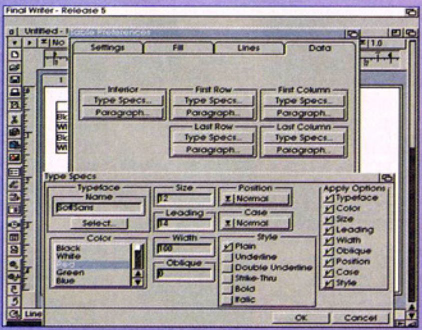
Style sheets have been refined as has the ability to select fonts. You can now set a style to choose what style will automatically follow it in the next paragraph so that when you hit return in the text, it will automatically change to the next style.

Preferences for all the different types of objects can be saved, as can the document preferences. The requestors can be made to use the standard ASL style and you can now select a set of fonts to be pre-loaded every time the program starts. The ARexx commands have been refined and new ones added, such as "Make new paragraph style" to create a new style from the current paragraph's settings. The majority of new ARexx commands are concerned with the new table features and servicing those.

The grammar correction facility has been tweaked and accelerated, but computerised grammar correction is so notorious that I doubt many people use it anyway. Better is the inclusion of the auto-correct feature.

Not necessarily a feature, but worthy of a mention, is *FW5's* ability to deal with virtual memory. With its new features, *FW5* should be able to do some amazing things and despite its reasonable system requirements, you can't expect to do very much without a decent amount of RAM especially when you start importing images. However, it is stable when using VMM so you can use that to compensate and load as many pictures as you want.

The Table preferences show just how flexible this new feature is.



IN THE FUTURE?

The questions begs itself – is there any point in seeing this program develop any further or is this enough? Well, there need to be some bug fixes. The HTML export needs fixing and I wish it were easier to switch between text and pointer modes for moving pictures and tables.

On-line help would be a real boon and given that there is now a whole suite of programs in the *Final* range so would some sort of dashboard like the *Office* toolbar which allows you to create a document in any of the packages or open any of them as they are all stored in a default directory. Maybe the whole range could then be sold together as a suite for a special price. As for any new real meat features, perhaps a small graphing facility would be useful. Some might say that this isn't the job of a document package, but *FW* already handles images and with the addition of tables, it proves that one package can supply data in more than just word form. To be able to input data into tables and then have them converted into a couple of different graphs would make it complete. Another thing that should be included is the ability to include files from other *Final* products so that the range can be integrated.

CONCLUSION

This new version certainly has plenty to offer. It would've been nice to be able to praise it wholeheartedly, but it let me down on the WWW front. The addition of tables is bound to attract people and the list of new features should rightly tempt many *FW4* users. Users of earlier editions would be mad not to upgrade, but I wish that I hadn't had to write about further additions. I'd really hoped that *FW5* would be the pinnacle of achievement.

FINAL WRITER 5

DISTRIBUTOR
Softwood Europe
01773 836781

PRICE
£74.95 (full version)
FW4>FW5 £22.95 (other upgrade prices available)

SYSTEM REQUIREMENTS
WB2+, hard drive, 2.5Mb RAM (more recommended, as is faster CPU)

MANUAL ●●●●
As clear as ever, a thorough addendum to the main manual.

ACCESSIBILITY ●●●●●
Most features are very easy to use. It's hard to imagine a powerful product being more accessible.

FEATURES ●●●●
All in all, *FW* is packed to the gills. The new additions vary in importance, but the HTML should have been better.

VALUE ●●●●●
This is the upgrade 4 should have been, but even at full price, it's a bargain.

"A magnificent product, only marred slightly."

90%

CDROM BASED

* Special offer or sale price

CD010	GOLD FISH 1	£19.99
CD028B	FONTS & CLIPART	£9.99
CD033	THE AMOS LIBRARY	£16.99
CD034	ASSASSINS GAMES	£9.99
CD040	EUROSCENE	* £4.99
CD042	W.SCIENCE CLIPART	* £7.99
CD043	W.SCIENCE FONTS	* £7.99
CD044	SOUND TERRIFIC	£19.99
CD051	PRO IFF & PCX	£9.99
CD057	LIGHT ROM 1	£39.99
CD058	GOLD FISH 2	* £14.99
CD059	AMOC 2&3	£19.99
CD060	HOTTEST 4	£7.99
CD061	VARIOUS 1-1500	£7.99
CD062	LSD TOOLS	£7.99
CD066	TOWN OF TUNES	£19.99
CD067	ILLUSIONS 3D	£5.99
CD071	ULTRA MEDIA 1+2	£14.99
CD072	ADULT SENSATIONS	£17.99
CD078	EMERALD MINDS	* £9.99
CD097	FRESH FONTS	£14.99
CD098	W/S ANIMS	£17.99
CD099	LSD TOOLS 2	£19.99
CD103	FRESH FONTS 2	£19.99
CD108	BEAUTY OF CHAOS	£4.99
CD113	GIGA GRAPHICS 1,2,3,4	£29.99
CD114	THE LIGHT ROM 2	£39.99
CD115	FRED FISH TEXTURES	£39.99
CD117	CD BOOT V2.0	£24.99
CD141	THE LIGHT WORKS	£19.99
CD143	TETRA SOUNDS	* £4.99
CD147	CD WRITE	£44.99
CD156	MAGIC ILLUSIONS	£7.99
CD165	GATEWAY	* £7.99
CD168	UPD SET 1	* £24.99
CD176	CRAFTWORKS	£8.99
CD183	GURU ROM	£49.99
CD186	GROLIER ENCYCLOP	£24.99
CD190	IMAGINE 3.0 ENHANC	£39.99
CD191	LIGHTWAVE ENHANC	£39.99
CD192	SUPER CARS - PICS	£4.99
CD199	GLOBAL EXPERIENCE	£23.99
CD202	FROZEN FISH 95	£19.99
CD203	WORLD INFO 95	£19.99
CD205	ARCADE CLASSICS	£14.99
CD206	ADULT SENSATIONS 2	£18.99
CD211	ASSASSINS GAMES 2	£18.99
CD213	LSD COMPENDIUM 3	* £14.99
CD219	FRESH FISH 10	£19.99
CD225	AMIGA TOOLS 3	£24.99
CD226	XI PAINT v4.0	£39.99
CD227	GOLDFISH 3	£19.99
CD228	GAMERS DELIGHT 2	£24.99
CD230	SEXY SENSATIONS	£19.99
CD234	ZOOM 2	£18.99
CD236	W/S COLOUR ART	£7.99
CD237	OCTAMED 6	£29.99
CD247	PERSONAL SUITE	£39.99
CD272	UNIVERSE OF GIFS	£14.99
CD276	HORROR SENS	£19.99
CD277	ADULT 3D SENS	£19.99
CD278	NOTH BUT TETRIS	£9.99
CD279	GIF SENSATIONS	£19.99
CD280	3D IMAGES	£9.99
CD281	NEW WORMS EXTRA	£ RING
CD282	NEW 2,500 TEXTURES	£ RING
CD283	NEW DEM ROM	£ RING
CD284	NEW DESKTOP VIDEO	£ RING
CD285	NEW AMIGA 3D	£ RING
CD286	SCENE STORM	£19.99
CD287	EPIC COLLECT 2	£19.99
CD288	MWB ENHANCER	£14.99
CD289	W/B ADD-ONS	£24.99
CD290	WORLD OF CLIPART	£18.99
CD291	WORLD OF SOUND	* £4.99
CD293	AMINET 11	£12.99

* Double check prices when ordering as many of the above are Special Discounts

HARDWARE

*** Internal 6 speed Commodore Branded IDE CD Drive with IDE-Fix (registered ver).**
*** £75 |Commodore 6 speed CDRom Drive**
*** £50 for software ide-fix (shware version of the software is also avaible for free with any cdrom or cdrom drive purchades).**
*** 540Mb 2.5inch hard drives £130 including install software & internal connection lead.**
*** Come down to our NEW shop show/room & collect your h/ware open 6 days a week.**

PROGRAM + TEK

^+ V0298NORTHC V1.3 (AB)
The latest update on the public domain 'C' environment for the Amiga that I am aware of.

^+ V0523DICE C COMPILER (AB)
Contains Matthew Dillons full featured. powerful C compiler and environment system.

^+ V0786PASCAL
Contains everything needed to program in Pascal. Includes A68k 68000 assembler. Blink, Linking software and PCQ, a modest Pascal sub set compiler.a

^+ V1041DIGITAL BREAD BOARD
is a full GUI digital logic circuit simulator. Digital Breadboard currently supports 2 and 3 input etc

^+ V1056DEVELOPER
Contains the official Commodore developers kits for the Amiga Guide and Commodore Install utilities.

^+ V1060CIRCUIT BOARD DESIGN
Several terrific routines for the electronic enthusiast. Includes PCBtool, a circuit board design tool.

^+ V1209GNU C++ COMPILER (3) [HD]
Theses disks consists of the latest version of the GCC environment. Thus the compiler, driver, assembler, linker, header files inline code generation of library calls.

^+ V1213PROGRAM LANGUAGES
ACE v1.02, is a PD Amiga BASIC compiler which, in conjunction with A68K & Blink produces stand alone executable's. run time shared libraries are required.

^* V1227GAD TOOLS V2.2C
A standard Amiga shared runtime library which makes it a lot quicker / easier to build standard requesters into programs. Designed with CBM's guidelines in mind.

^+ V1384HOW TO CODE IN C (AB)
Coves Debugging, Intuition and Graphic, Kodbibliotek, Tips & Tricks, Anropa AsmFranC, Dos Intuition, WB start, DMake, GadToolsBox and Power Source.

^+ V1430N.D.U.K V37 (ABCD)
Portions of the Commodore Native Developer Update Kit that can be licensed for distribution. Includes the fd files, libraries, startups, C include files, and tools

^+ V1905MATHS FORMULA EDIT V2.1
MathScript is a formula editor, which is used to integrate mathematical formulas into word processors or DTP programs. It has an extensive amount of mathematical and physical symbols and many controls for creating fractions,roots, exponents.

^+ V1909REQCHANGE V3.6
Patches Intuition, ASL, ARP & REQ to use the Req Tools requesters instead. It also adds a couple of extra features, like an Assign Wedge, the possibility to send ARexx commands when a patched requester appears, & several options to configure how the patches behave.

^+ V1919MOTOROLA CROSS ASSEMBLER'S V2.0
Assembler's AS0,1,4,5,9,11

UTILS & POPULAR

^+ V1362CHECKERS TOOLBOX
Incredible Amiga diagnosis program. Runs self test on all chips, all the ports and even the disk drive! All your hardware is tested and displayed in graphical information. Every Amiga owner should have a copy! Find out what is wrong with your Amiga before going to the repairer to get it fixed. It may save you a bob or two!

^+ V1405VIRTUAL UTILITIES
Contains 5 utils containing everything needed for any Amiga user to make virtual memory from their harddrive. The Amiga is fooled into thinking it has massive amounts of RAM when really it only has a small amount mapped to a file on the harddrive.

^+ V1719TELETEXT V2.3
View Teletext (also know as Teletekst, Videotext, Ceefax, Skytext, Supertext etc.) on your Amiga. It is suitable for any PAL Amiga (read @{ System requirements link systems req } for more info, because it uses the parallel port to interface with the hardware. An electronic switch is provided to easily switch between the TeleText decoder and a printer.

^^ V1335LIBRARIES & DATATYPES
This is a disk packed full of Amiga Workbench 3.0 Libraries and Datatypes, There's 47 Libraries from A to Z all libraries covered are right up to date and waiting to be installed. The disk also have installation notes to aid the beginners. also files in the L and Devs/DosDrivers drawers that can be copied or assigned.

^+ V1641SUPER KILLERS V10.0
The latest collection of virus killers like AntiCicloVir v2.2a, Virus Checker v6.43, VirusZ II v1.07, and VT v2.67, Req the use of LHA which is in the c directory.

^* V1017POST V1.86ENH (ABC)
PostScript interpreter which implements the full Adobe language. Supports Adobe type 1 and type 3 fonts, screen output, file output, and printer output.

^+ V1593EPU DISK STAKKER V1.7
Double your hard drive capacity by installing EPU. After installing EPU to any Device (HardDisk, Floppy, Rad etc) every file which will be written to the device will be compressed & when any compressed file is read by any application it will be decompressed.

^+ V1039HD INSTALLER (AB)
Bought an A1200 machine and are having trouble with your hard drive why not install it correctly.

^+ V1136DISKSALVE 2
Repair your hard drive with this. recommended.

^+ V1326C: COMMANDS & LIBS
The C: and LIBS disk contains over 100 commands lie within the C directory. Over 20 LIBRARY's are within the LIBS directory. Use them for your disks. They can be used to spice the disk up in appearance and in usage.

^+ V0490MESSY SID II
once loaded will read MS Dos disks, Convert any text (asc) files on to an Amiga dos disk so that they can be loaded into any standard Word processor. The program will also convert the text back to your IBM disks.

^+ V1611SNOOPDOS V3.0
Log's all the dos/library calls and more when you run a program. This is handy for both the programmer and the beginner. Have you ever installed a program to your harddrive and then discovered that it will not run without a certain library but you don't know which?

^+ V1928VIRUS WORKSHOP V4.8
This is the one and only Virus Workshop by Markus Schmall. Now in the Version 4.8 . Test it!

^+ V0424ANTIFLICKER
A program to stop the Flickering when you use the Amiga in Hi res move.

^+ V1669TUDE V1.0
is a very extensive and easy way of degrading your machine for all sorts of purposes. It is useful for playing old game on A1200s for example which need kickstart 1.3. There is a GUI version included as well as a CLL version so most people will have no trouble using it. A highly useful tool for all Amiga owners. Good.

^+ V1523RELOKICK V1.41
ANOTHER(!) version of ReloKick. Galahad of Dual Crew did ReloKick 1.4, so I decided to improve on that!

^+ V1356NOERRORS V1.3
Its main function is to hide physical disk errors from floppy disks and hard disks, so these disks can then be used without DOS showing read/write errors.

^+ V0662DCOPY V3.1
Best PD copier on the Amiga. Now Features over 2 but has been updated with new code information.

^+ V1164(AGA) ASA FIX DISK
An entire disk full of utilities for those A1200 and A4000 owners out there who can not for the life of them get some of there favourite games or demos to work.

^+ V1360WB2.0 TUTORIAL
There is a lot more options open to you than just playing games. In the chapters Files Explained & Menus. attempt to explain the workings of WB2,as the manuals supplied with your Amiga.

^* V1242RE ORG V3.11
is a fast disk optimizer that can be used for floppy disks and hard disks. Supports new Kickstart 2.04 features including hard and soft links and High Density drives.

^+ V0685APRO ASTROLOGY V3.5
Astro_22 as released is a starter program which accurately calculates the position of the planets, cusps and zodiac position to within 30 seconds of arc. I intend to increase the usefulness of the program to eventually cover all aspects of the subject which will appeal to professional as well as novice astrologers not wishing to pay 200+ for a decent package. Updated version

^+ V0489AMIBASE PRO II
This is the latest database program which is an update

^+ V0827REPAIR IT V2.01
An essential set of tools for recovery. Disk speed reports the speed of a selected drive. DiskSalv will try to recover as much data as possible from a corrupt disk. HDTool will install the OS3 disk caching and FFS to the hard drive of a lesser operating system.

^+ V1661NATIONAL LOTTERY
This is a national lottery prediction program called Lottery Winner. It consists of a database system which can record the National Lottery results from week to week until it has sufficient data to make certain types of predictions or just a random guess. Good.

^+ V1679COP THE LOT
Lottery prediction/database which can store the previous lottery results and also select random numbers etc.

^+ V1771COURSE FORM
Like to put a bit of money on the horses? This utility allows you to enter the figures for the horses in a particular race, plus the course details, and then it will try to predict the winner of the race. Good.

^+ V1778LOTTERY CHECKER
is a great tool for checking lottery numbers. Good for office syndicates. Find 'A' Date is a database which stores and matches people up for blind dates. Sneaker is used to view and change binary files, technical users are always finding these programs useful.

^+ V1836MRBACKUP V2.1.4
is a hard disk backup program for the Commodore Amiga family of computers. It provides a wide range of services to support Amiga file management and backup/restore of files to/from hard disk.

^+ V1837DISK DOUBLING V1.9B
This package allows you to create virtual partitions pn your HD. Files stored in such partitions get automatically compressed and decompressed whenever you access them, in a transparent way.

^+ V1838VMM V3.0
A virtual memory manager for Amigas with a 68040,68030 or 68020+68851 processor.

^+ V1932X-FILES GUIDE
The X-Files Guide disk is full of very useful information if you are interested in the x-files. It contains over 674k worth of text, ranging from episodes 1 and 2 to the x-files transcript. It also has a survey you can fill in and send off to the author of the disk.

^+ V1949MORE HD INSTALLERS
This disk contains the latest installers for the following games: ABASE, Arnie 2, ATR, Bump 'n' Burn, Naughty-ones, Rise of the Robots, Sensible World of Soccer, Shadow Fighters, Lion King, MKII_PAFIX, Parasol Stars, Rock'n'Roll, Skimarks 2, Skeleton Krew, Super Stardust, SoftB3, Trolls and Uridium 2.

^+ V1963VIRUS WORKSHOP V5.1
This version of Virus Workshop is as good as any of the others or even better. You can check every single file on there own or all together. If it finds a virus it will tell you what it is and exactly what to do to get rid of it. This is probably the best version of Virus Workshop so far and well worth buying.

^+ V1965BALLS
Balls is yet another lottery predictor program. It is actually quite good apart from the £5 fee if you want to get the registered version. It can predict random numbers or numbers from pre-entered numbers of upto 72 weeks earlier. A well presented lottery predictor, if your into all the lottery hype get this.

^^ V1969AQUARIUM SIMULATOR
3d Aquarium Simulator (uses MUI2.0). check it out.

^+ V1982SCOUT V2.1
Scout is a tool that allows you to monitor your computer system. It displays many different things like tasks, ports, assigns, expansion boards, resident commands, interrupts, etc.

^+ V1983DOPUS UTILS 2
This is the second selection of utilities for use with the most popular Amiga Disk utility Directory Opus.

^+ V1997LOTTERY PREDICTOR
Another lottery prediction system. This latest addition has a few added advantages over the other available. For a start this one uses intuition fully so it multitasks and it uses only a small window on your workbench. Also it looks very nice! The added touch of the lottery symbol makes all the difference. The best lottery predictor yet.

^+ V1998AMIGADOS GUIDE V1.5
A very handy program for those who want to learn more about Amiga DOS or those who simply want an easy reference for commands etc.. The program consists of an easy to use point and click system with a index.

^+ V1999COP THE LOT PRO
Yet another lottery program. This one will only generate random numbers, there is no option to actually make any sort of calculated prediction. There is also a Numbers drawn database and a My guesses database to help you keep a record of the numbers you have been choosing.

^+ V2000BACK DOOR V6.0
This is the latest version of this now quite well known game cheat database. There are cheats and tips for hundreds of different games including a lot of recent titles. There are even long entries for games such as Dune II, which is a tactical game, detailling good methods of play

^+ V2001NATIONAL LOTTERY
This program is more than just a random number generator. It uses uses a special History formula with Chaos Theory to produce a more accurate prediction.

^+ V2004LOCKUP V4.0
is the newist version of the old utility Lockup which basically allows you to Lockup your hard drive with a password to enter and get it going again.

^+ V2005SHAPE SHIFTER 3.2
is a multitasking shareware Macintosh-2 emultor for the Amiga. It allows you to run mac software withour additional hardware. New updated verion.

^+ V2014MESSY SID 3.0
this is the latest verion of which will read and write PC Floppy disks 720k or 1.44 if your drive can take it.

^+ V2015MOVIE MAKER 2.0 (AB)
have you ever wanted to create your own movie and see it flourish in the Oscars, then nows your chance.

^+ V2026ROUTE PLANNER
Highway trip planner. Requires MUI 2.2

^* V2051DOPUS 5 EXTRAS VOL 1 (AB)
This set of disks contains a selection of new archives for use with DOpus v5.0. ArcByName - Arc-script for Dopus5 and Lha/LZX V1.0. Dopus511 - Patch for Directory Opus 5.0 & 5.10 -> 5.11. DOpusLhARexx2 - Handles LhA archives from DOpus. DOpusReg - DOpusReg.lha: Opus 5.11 fix for AFS problems. DOpus_CleanRAM - DOpus AREXX script for cleaning ramdisk. LhALZXDirDOps5 - Modified LhaDir.dopus5 to work with lzxdir.dopus5. player3_0opus5 - CDDA & soundplayers/saver for DirOpus5. xpkdopus - XPK support for DOpus5 (ARexx&Executable).

^* V2060GFFT SPECTRUM ANALYZER
GFFT Version 2.03 is the update to GFFT version 1.12. The GUI is improved considerably (allows any font and screen color setup, has progress indicator, uses tooltypes, etc.), more features are added, bugs are fixed, and a new SpectrumAnalysis.guide is included (with lots of pictures) to explain spectrum analysis.

^* V2072VIRUS_CHECKER V8.04
Best virus killer on the Amiga to date. Updated version with bug fixes and updated virus information.

MWB& W/B

^* V1043SUPER DARK V2.1A
A screen blanker with some special features. It is similar to the After Dark screen blanker in the PC and Mac worlds. Features include a lot of different screen effects, a screen locker, and more.2

^+ V1964COLOUR WORKBENCH
Allows you to basically change your workbench screen to purple or whatever colour you fancy. It also changes the font from the usual workbench one to one that is really small. There are icons which allow you to change the one's you already use to some they have. They have also included some backdrops for you to use.

^+ V1968STAR TREK BACKGROUNDS
Heres some new backgrounds for workbench all based around the Star trek T:N:G series.

^^ V2045ICONIAN v2.96
OS3.0 icon editor, NewIcon support.

^+ V2048CALC
Arbitrary precision calculator/language

^* V2053BLITZBANK V1.53 [1.5MB]
is a very powerful personal accounts system and is ABank compatible. 1.53 fixes two important buggs of the version 1.52 I couldn't wait for having new features because these buggs were really too annoying.

^+ V2061BERZBENCH V1.1C
Probably the best patterns for WB

^* V2062ICONOGRAPHICS V3.0
is a collection of eight colour icons for Workbench 2 and 3. All standard system icons are included, with many additional icons (PD/Shareware programs, different types of data, custom drawers, and ToolManager dock icons). This release includes about 350 high quality icons. Every icon contains an alternate image that is displayed when the icon is clicked on.

^^ V2063MWB IMAGEDRAWERS FULL COLLECTION
This is a full MWB image drawers' collection, I added 42 new drawers since the first release (MWBDrws_474). I was tired of wastin' time every time I was searchin' for a particular image drawer, so I collected all the drawers I found on Aminet in a single collection. I hope this could be useful to someone else, but if you still prefer searchin' through all Aminet files... good luck!!

^* V2064100 USELESS PATTERNS
102 background patterns in 2, 4, 8 and 16 colors.

^^ V2068JTE MAGICWB ICONS 5/6/7/8
JTE MagicWB Icons 5 - This package includes 90+ new MagicWB icons. JTE MagicWB Icons 6 - This package includes 37 new MagicWB icons, 1 WB pattern, 2 TMbrushes and 96 lame Pattern icons. JTE MagicWB Icons 7 - This package includes 60 new MagicWB icons. JTE MagicWB Icons 8 - This package includes 30+ new MagicWB icons.

^^ V2069NEW BREATHTAKING PATTERNS FOR MAGICWB
This package contains 11 photo-realistic backgrounds: Beach.png, BricksGrey.iff, Clouds.png, Confetti.iff, Mountains.png, Pebble.iff, Storm.iff, Stucco.iff, Terrace.png, Thunder.png, Valley.png. You need a PNG-datatype and a program to adjust the first 16 colors of your Workbench to the right colors.

^^ V2070MWB ICONS, PATTERNS
A collection of really nice MWB compatible stuff. Guide included.

PRO-SOFT

*** We have set up a Special Offer for you.**

If you want more details on any of the following disks or want information / prices for the registered versions ring PRO-SOFT on (0973) 702718.
(a) Each shareware version below comes with a £5.00 discount for the registered version.
(b) Each PRO-Soft disk can be purchased for £1.00 each or £4.00 for all 5 disks. (Please note our min order £10).
(c) Order over 20 normal PD-Soft disks and get all 5 Pro-Soft disks **"FREE-OF-CHARGE"**.

^+ V2073PRO-LOTTERY 96
Don't believe that lottery prediction is possible? Have a look at Pro-Lottery, and you might find that you begin to think otherwise! It DOESN'T pretend to guarantee you a jackpot win, but it does genuinely improve your chances of regular small-medium wins. Ideal for syndicates or individuals.

^+ V2074PRO-FOOTBALL
An extremely easy to use, yet powerful prediction system for use on both football pools and football fixed-odds. Evaluates each match, and presents you with the most likely outcome. (Amiga Shopper Star-Buy, Amiga Format Selection Of The Month)

^+ V2075PRO-GAMBLE v2.2
An easy to use, yet surprisingly accurate, horse race prediction system. Requires little racing knowledge - just any daily newspaper and 20 minutes! Generates predictions in a useable format (eg: Placepot), and can even calculate your winnings for you!

^+ V2076PRO-GREYHOUNDS
As Pro-Gamble, but for the dogs - Very user-friendly.

^+ V2077BOOKIE BEATER
Ever been unsure as to which selection in an event you should back? Bookie Beater allows you to bet on more than one, safe in the knowledge that you'll make the same profit no matter which one wins! Can be used for any 'bettable' event.

EMULATORS

!+ V0817A500 PLUS EMULATOR
Have amiga 500 and want workbench 2.0 then just install this disk onto your floppy 1.3 version of workbench or your HD for complete WB2 compatibility.

^* V1178KICKSTART 3 EMU
Kickstart 1.3/3.0 emulator and decibel patch program will give you the option to have kickstart 1.3 or 3.x(as used in NEW Amigas) in your Amiga. This is much enhanced over the version that was given away free.

^+ V1336THE BBC EMULATOR
Contains commands to allow existing files to be transferred from a BBC with DFS by means of a serial cable.

^+ V1659MSDOS/AMIGADOS V2.3
This is a very interesting utility which should be useful to anyone who uses both PCs and Amigas. The tool allows you to create a directory on which you can store MSDOS commands and then they can be used through the shell as if they were AmigaDos commands. Great.

^^ V1868PC TASK V3.1
is the first and only software 80286 emulator for the Amiga range of computers. Transfer files between your Amiga and MSDOS. Compatible with MS Windows 3+

^^ V1931ZXAM v2.0
The latest Spectrum Emulator available. Basically it allows you to run Spectrum software on your Amiga. Requires the AGA chipset but does require WB3+ and a 68020 CPU or better

^* V2059FRODO V2.0
Frodo is a multitasking freeware C64 emu for the Amiga. OS2.1 and a 68020 (or better) are required, as well as copys of the original C64 ROMs, which are not inc.

OFFICE & PRINT

^+ V0575HOME BUSINESS PACK (6)
QED, Text editor. Text Plus 2.2E, Word Processor. AZSpell, Spell Checker & Dictionary. BBase, A Database program. DATA EASY, Another database. BizCalc, Loan calc. LCD, Calc. SPREAD, Spreadsheet. Budget, Personal Finance. UNITS, Various conversions. CLERK, Small business accounts. SUPERDUPER, FLASHERCOPY, Copier's. TYPIST, Typing Tutor. BOOTX, Virus Killer. SYSINFO, System analyser. DOSMANAGER, Directory program. FONTLIST, FONT MANAGER, Utilities. PRINT STUDIO, Printing Tools. (6 disks)

^+ V1114PRINT LABELS UTLS
Includes various programs like DOC DUMP v2.1, ENVELOPE PRINT v1.20, INLAY MAKER v1.4, MC MASTER v1.1, BANNER v1.0, LABEL PRINT

^+ V1279PRINT A CARD
Want to print a business card or any other type of card then this is the software for you.

^+ V1222PANASONIC STUDIO
The PanaPlus driver is a software for controlling printers with the Commodore Amiga personal computer.

^+ V1236INVOICE PRINTER
invoice printing that we help aid any small business.

^+ V0928LITTLE OFFICE
Its the all rounder do everything, all knowing, all seeing?? Well lets just say its very good.

^+ V1179FILE-O-FAX
was designed to enable computer operators to be able to work at their leisure without worrying about forgetting those important meetings,what they had to do on any particular day or locating business colleagues tele no's.

^+ V1467AWARD CONSTRUCT
A very handy tool for creating your very own awards and certificates. There are many styles, fonts and graphics to choose from. could also be used to make small posters, signs or leaflets. Easy to use and very effective.

^+ V1069PRINTER DRIVERS HP
Deskjet 550 colour driver, Deskjet 500, Deskjet 500c, Ricoh HP1200 400dpi, Canon LBP, Canon BJ300, BJ130, BJ10e, Canon_48, Canon PJ 1080a, HP Paintjet.

^+ V1278MAIL-O-DEX
An excellent way to keep names, addresses, Phone numbers, comments etc and then print out labels loads of them in 1,2,3 and 4 columns.

^+ V1044FANCY PRINTING
BANNER v1.4, GRAPH PAPER v1.2, DISK PRINT

^+ V1357CITIZEN MANAGER
The Citizen Print Manager has been designed in conjunction with Irseesoft.

^* V1051EASY CALC PLUS
is a spreadsheet designed to be both easy to use and fast. If the program looks nice, that wouldn't to be bad either. Unlike other software where the author writes the program first, then bolts on a help system, I have designed the help into the program from the beginning.

^+ V1184AMIGA DIARY
Amiga Diary is a mouse driven diary capable of storing all personal events and the perfect solution to all those forgotten birthdays, missed appointments etc.

^+ V0366600 BUSINESS LETTERS
Over 600 Standard business letters on this disk. Can be used as they are or insert parts into your own letters

^+ V0782FORMS UNLIMITED
Designed to help you design and print different forms. There are a wide number of options and controls which allow you to draw simple boxes, lines, etc in order to create forms for many different purposes. Good.

^+ V0390AMIGA FOX DTP
The first amiga PD Desk Top Publishing program. Excludes various extra features over the old Word processor, Test Editor, Graphics editor and loads more.

^+ V1680AWARD MAKER 2
This is a very good tool for the creation and printing of Awards and certificates. There are hundreds of types to choose from then you can choose a font a border and also some of the text etc. Very good results.

^+ V1751PRINTER DRIVERS
CANON600 v2.0: EPSON FX 850 v1.0 & LX 800, HP4DRIVER v35.8, HP4LSETTER v2.01

^+ V1858DB V2.5
Small/fast database program that I wrote after having tested numerous other PD database programs and always found something lacking or irritating me. They might have dozens of features not found in db, but they lacked font sensitivity and a standard GUI look & 3.0

^+ V1862INVOICE DATABASE V2
Intra is a rather simple, but therefore easy to use database program that was especially designed to deal with invoice information. Everybody, as we like it

^+ V1865LEGAL FORM GENERATR
Generates custom do it yourself legal forms. Database includes forms useful for EVERYONE, plus specialised forms for real estate, small businesses, landlords, employers, etc. Can save you THOUSANDS.

^+ V1995BEGINNERS TYPING TUTOR
This is by far the best typing tutor for years I have seen on the Amiga. It is worth every single penny. It consists of two games, one is called the letter game and the other one is called the word game. On the word game you have to type a word in before the timer runs out. A must for all typers.

^+ V2003REM DATE V2.0
Rem Date is a calender, reminder and fileofax all in one. I found it quite good to use and would definetly buy the registered version which is availble from the author.

^+ V2019TEXT ENGINE v3.0
Allows you to make your every own letters and documents then print or store then on disc.

3D & GRAPHICS

^+ V1247TEXTURE MAPS (ABC)
A collection of textures for use with the any program that will take high res textures.

^^ V1554IMAGINE BUDDY (AB)
Here's some features of the new interface: Draggable and Sizeable text and index windows · Button Gadgets for the Search and Move functions Improved Searching The text is now positioned at matching hypertext links and all matches are highlighted for visibility.

^* V1229MAIN ACTOR V1.53
This is an all round animation utility that will create, playback, time and edit animations of any length or format (including graphics cards). Very good. (AB)

^* V1811IMAGESTUDIO V2.0 (AB)
is written for the casual graphics user who wishes to convert or manipulate various graphics formats on a modest Amiga system. There are several commercial offerings available, however the casual user is paying a lot of money for many facilities and options they would probably never use.

^* V1891IMAGEDESK V1.6
is a program to catalog picture directories by generating small representants of the pictures, so called thumbnails.

^+ V1907POVRAY RAYTRACER
Renders in a window on a public screen (even Workbench) with colour sharing. simple HAM/HAM8 support autodetects Cybergfx Screen and renders in direct Colour (15/16/24Bit) if possible.

^+ V1916XFIG V1.2
This is an Amiga port of an X11 structured drawing tool that lets the user interactiely create and manipulate on objects such as lines/circles rectangles/splines/text and other elements. Xfig can produce output in several different formats: Encapsulated PostScript, IBMGL (HP/GL), Pic, PiCTeX, LaTeX, box, epic, eepic, eepicemu, textyl, tpic, X11 Bitmap, X11 Pixmap and gif.

^+ V1922REAL 3D V2.X OBJECTS
Objects are pretty large in size, espessially the 4 cylinder engine, you might run out of memory pretty fast. My Amiga 4000EC30 + FPU is now equipped with 18MB RAM, and I can now raytrace all of my objects.

^+ V1925SPACEDOCK STATION
* 1.3Mb, so you'll need a healthy chunk of memory. * No Slicing was used in modelling, to keep things as small as possible. * Space Doors open using the new States function. * Marquee of Space Door lights.

^+ V2042RAY STORM v1.11
Fast raytracer with many features

^+ V2047SVIEW v5.10
SuperView V5.10 + Library 12.2

^+ V2057IMAGINE OBJECTS 1 (AB)
Contains a selection of objects and extras for Imagine - BLOBS_PRJ - Project to generate a blob animation. DAN_CLASSICAL - An Imagine 2.0 model of a classical guitar. DAN_ELECTRIC - An Imagine 2.0 model of an electric guitar. EAGLE_OBJECT - Eagle Freighter object for Imagine. MANGABABESDEMO - Sexy female human 3D models by Tomwoof. PZKPFWIV - Imagine Object of WWII Mark IV Tank. T65_X_WINGFULL - Large, Detailed Imagine 2.0 X-Wing object.

^* V2065IFF256 720*460, CHIPS, DISKS & FLOWERBED
IFF256 720*460, Chips, Disks & Flowerbed - Use as backgrounds with Scala or Euro-demos where text is put on top of a background/wallpaper etc.

^+ V2066IFF256 720*460, GRAVEL, JEANS & WOODFENCE
To use as backgrounds with Scala or Euro-demos

^+ V2067IFF256 720*460, PENNYS, SAND & SQUARES
To use as backgrounds with Scala or Euro-demos

COMMS

Why not check out our BBS (0181) 2510078 or email -

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5 Disks For £10 + £1 P&P
10 Disks For £17 + £1.43 P&P
15 Disks For £21 + £1.43 P&P
20 Disks For £25 + £2.45 P&P

coming soon web pages.

^* V1745TERM V4.2 [030]
latest version of this very well known comms terminal program. Version 4 has even more features and although it is not for beginners it is probably the best available.

^+ V0979NCOMM V3.0
Is a comms program based on Comm v1.34 with lots of very nice enhancements. Has new functions over v2.0

^* V1722AMIGA TO PSION S3/A
is a implementation of the Psion link protocol which is e.g. built into the Psion S3/S3a ROM. It's main purpose is to provide vice versa nfs like file access.

^+ V1852FINALFAX 95
This is one of those arexx macros which are very handy for automating the more tedious jobs on your Amiga. This one allows you to select options for GPFax from within Final Writer. That means that there is no need to switch from Final Writer to Workbench.

EDUCATION

^+ V1079KEYBOARD TRAINER
This program only concentrates oh basic keyboard skills, and is in effect, still a Beta Version, I think you will find it a vast improvement on most so called tutors.

^+ V0793AMIGA BEGINNER
You asked for it! A tutorial for the beginner on using your amiga! Covers the CLI and Workbench, its great for learning about the Amiga. Also contains numerous beautiful 16 colour icons for WB v2.04.

^+ V1845DPAINT 4 BUDDY (AB)
Will teach you how to use Dpaint 4. It works by running along side the well known paint package providing hands on demonstrations of the various features. It is a very good way of learning a program so you want to learn DPaint then this System is one of the best ways.

^+ V1881AMIGATRAINER
very powerful & flexible program to learn foreign languages. You enter the words yourself, so they aren't related to any special language, school or book. every word there are 2 additions to enter.

^^ V1897GEOGRAPHICAL ATLAS
AmiGlobe is a geographical atlas that allows you to navigate in the world map, zooming everywhere, get country data, etc. Requires 2Mb of RAM. (AB)

MUSIC

^+ V1269THE OCTAMED TUTOR
Welcome to the Octamed Tutor, a simple guide through the basics of this excellent music program.

^+ V1207OCTASTUFF
Welcome to OctaStuff, a disk based around work with OctaMED 3 and 4.

^+ V1882ART OF NOISE TRACKER
NEW tracker, NO ProTracker Clone!, 8 channels, fm synthesis, drum sequencer, wave table synthesis.

TIPs, CHEATS

^+ V1416EYE OF THE BEHOLDERS
This disk contains a selection of utilities and software for Eye of the Beholder II, like end of level saved game file, Eye of Beholder 2 special quests explanation, EOB2 Character Editor, Eye of the Beholder Solution, GIF pictures of all 12 levels in Eye of the Beholder.

^+ V1363RPG. ASSISTANT
AD&D play time dungeon master's assistant. The version you see here is a pre release of the program in AmigaBASIC. Right now it will take characters in a text file and load them in to be displayed at will. It also rolls dice and has a handy dandy encounter screen that will keep track of monsters & their current HPs

^^ V1687(AGA) FIXES VOL 1
This program disk will help AGA machine users get some added compatibility out of their older software. Don't forget many supposedly incompatible programs will work on the AGA machines by suitable adjustment of the boot options. (Hold down both mouse buttons).

^+ V1773ACTION REPLAY CHEAT
This disk has on it a text file which contains loads of codes for those people who have action replay devices. There are cheats for hundreds of games. Good.

^+ V1848DIY REKO
This disk has on it an Arexx macro which, when used in conjunction with ImageFX, will make reko cardsets for Klondike AGA almost automatically. Also included is a detailed Amiga Guide document explaining everything.

^+ V1468GAMES HD INSTALL
This disk provides you with the software needed to install certain games onto your A1200. The games that this disk can install are BodyBlows, Goal, Lemmings 2, Superfrog, and Walker. Could be very useful.

^+ V1662HD GAMES INSTALLER 2
Contains a variety of hard disk installer's for a few well known commercial games. These games are as follows: AlienBreed 2 AGA, Jungle Strike, Assassin (Special Edition), Body Blows, Goal, Ishar 2, Zool 2 AGA, Ruff and Tumble, Body Blows 2 AGA, StarDust, Super Frog, Walker, Rise of the Robots, Bubble and Squeak, ElfMania, Aladdin AGA and Motal Kombat 2. Great.

^+ V1885NEW HD INSTALL
Hard Drive Install scripts for 3 games, Beneath a steel sky Flashback King's Quest VI. New updated version (small bugs fixed from last version).

^+ V1988DUNGEON MAPPER V0.3
This is the first version of something called Dungeon Mapper. It will work on Workbench 2+. It allows you to design your own maps for games like Dungeons and Dragons which can be very usefull. It also has Tetris on it if you boot it from Workbench.

^+ V1994CHEATS COMPILATION
This disk is a demo which gives you a taster of what you can have if you buy the regestered version. The demo gives you a choice of about 15 games to chose from.

^+ V2040SW CHEAT v4.5
Over 950+ game hints/cheats.

^+ V2041F1GP Ed v3.03
Formula One Grand Prix / WC Editor & F1GP-Ed non-english translation files & Track data for GPDisplay

^+ V2056TREK-THE GUIDE V1.6
Trek-The.guide is a complete Star Trek Database. It contains a listing of all the Trek series' complete with an episode synopsis, original airdate, Director and Writer Credits and Guest stars. It also includes a section on very rare promotional press kits and values of them. There are cross references to episodes with you favorite aliens, time travel, and much more! Much of the information was supplied by Paramount. The full version (7 disks Shareware) contains over 170 rare promotional pics. Sorry: Contains the 1st seasons of the Trek series'.

VIDEO

^+ V1196DESKTOP VIDEO
Dot Matrix Stroller, Is a video titling program intended for use in adding scrolling captions to video's. Flood Effect loads an IFF picture and displays it with a Öflood effectÖ so that it floods the screen.

^* V1156VIDEO TITLER
Generates professional looking TV titles and credits for your own video's.Outstanding abilities are very smooth scrolling, colour slides (AGA support)and usage of colour fonts. Limited demo version only.

GAMES

^^ 4431 BEST AGA TETRIS
Best pentamino tetris. graphics, musics, 100% assembler

^+ 4434 BLACKDAWN v2.1
3-level Dungeon Master style Alien Breed:- charge around the maze levels, shoot lots of aliens, find the lift & move on. but do it in 1st person perspective view.

^+ 4442 SCORCHED TANKS V1.85
The awesome artillery tank game. This one contains loads of goodies like 70 weapons and 13 shield types as well as new goodies.

^^ 4449 PSSST
This is a 1990's version of the old Spectrum Classic PSSST Main features include: - 256 Colours. - Real Time frame rate. - No C code !!!! (I Hate C) - Nice end of game sequence. - Three Levels of play (Slow, Normal, TURBO NUTTER), No Spam.

^+ 4451 LAST LAP
is a car game for one or two players. It is excellent in two player mode. There are about 10+ different tracks for you to race around. Some of them are quite easy at the start but as you go on they get a lot harder. On the tracks they have these squares which if you drive over it shoots you on even faster they you are already going.

^+ 4452 SPELL TRIS
Tetris style game but the main difference is you use letters instead of just shapes.

^+ 4454 BATTLE TRUCKS
is a one or two player game in which you choose your own truck and then buy it. You can add nitros, new motors or even buy a brand new truck with your winnings from your races.

^^ 4457 SCREECH V1.5
This demo ame offers you the oppurtunity to run anything smaller than your car over! Improved graphics are on the way (whoopee)!. Req 020's with 1MB chip ram and .5MB fast ram or 030's with 1MB chip ram or 700kb chip ram and 300 kb fast RAM.

^+ 4459 SUPER EARTH DEFENSE V1.5
is a classical shooting game.

^+ 4462 XASTEROIDS
This is a 'port' of xasteroids, an X11 application. No X11 server (DaggeX or others) is needed to run the program! This program is using libX11 by Terje Pedersen! You don't need this either since it is a link library that is compiled into the binary.

^+ 4463 BOULDERDASH 64
A complete OS-friendly (multitasking) Boulder-Dash with C64 graphics and sounds. 68020+, AGA only (DblNTSC required), KS V39, asl.library, powerpacker.library. Smooth scrolling 1275(!) original C64 levels+sounds, Cheats, Joystick and keyboard control, User definable games and levels, two player game.

^+ 4464 BREAKIN' BRIKS V1.0
Great version of the very cool Breakout type game. For AGA Amigas only. Works with 2Mb CHIP memory! - Improved performance with FAST mem. Great GFX,

^+ 4465 CHAMPIONSHIP MANAGER EDITOR V2.4 68020+
This is the first public release of Championship Manager Editor (CmEd). It was written because we had played the game to death and were looking for a way of putting some interest back into game.

^^ 4466 DPACMAN AGA
15 levels and 5 bonus levels. The registered version has 50 levels and 15 bonus levels and extra gfx and other improvements. Features: Can use external Protracker modules and XPK for packed modules.

^+ 4467 JOUSTER 3
If you haven't heard of the good old favorite, Joust, then you're a pretty young or fairly old dude. :) Anyway, this game brings Joust to the Amiga and also has improvements such as powerups, etc. You can even have a pterydactyl as a steed. For 1 or 2 players. Check it out.

^+ 4468 PATCH LEMMINGS 2 TO RUN FROM HD
Patch to allow Lemmings2 to run from hard drive.

^+ 4469 CRITICAL HIT
is a highly detailed fantasy combat game, which re-creates tabletop war gaming on the Amiga (requires 1 MB RAM). A strategic war game with excellent graphics, 3 D landscapes and a wide variety of fantasy combat figures and scenery - Campaign and map designer.

^+ 4470 PANIC SOCIETY V1.1
Hillery & her friends have taken total control of the world. as one of some 10 million people left, scheduled for transfering to the country of your origin. But, someone has tampered with your environmental control causing you to awaken from a mind controlled state.

^+ 4471 BRATWURST
A Roketz-like game for two to four players. Automatic zoom keeps all players in view in the least possible area, vector graphics.

^+ 4472 CULTURE TANK
A single screen tank combat game with up to 6 tanks, which may be human or computer controlled. Team or all-against-all modes. 3 types of weapon including missiles and flamethrowers.

^+ 4477 WIZZYS QUEST
is the best PD platform/puzzle game I have EVER played, so despite its bugginess (see below) I thought I'd upload it to Aminet. Wizzys Quest has 50 levels, getting progressively harder.

^+ 4478 BIACCOARCHIVE! V1.0
Nibbler arcade clone by Maurizio Facca.

^+ 4479 BOB THE AMAZING LEMON
Amazing Pac Man clone which features a level editor, changeable music and many different wall and floor types including appearing walls, ice and water.

^+ 4484 REBELLION
is a very good shoot em up. You are a little spaceship which travells around space trying to pick up little aliens and destroying all the missles that are coming at you.

^+ 4485 LEGEND POUNDS ISLAND
Here we have an adventure game. Half graphical, half text based this game is played almost entirely using the mouse. Sprites backdrops with objects to examine or use

^+ 4486 MASH
An excellent game. You choose to control either a Spud (a potato on legs!) or a Tank. You then need to tackle a whole load of obstacles in order to get the enemy on the other side. Great graphics, great sound an allround classy.

^+ 4488 PSYCHEUAL
An Alien Breed clone. You are a bloke with a machine gun who has to run about each level shooting other people and aliens. The level graphics are good and show a lot of detail plus the gameplay is not too easy either.

^+ 4552 H.E.R.O
Something is going to happen. A big interactive event is going to take place. We are about to release a game which we had to miss for a long time now (too long if you ask me!). Coming soon is an Amiga version of the old Activision game H.E.R.O. And that's not all. You can be a part of its release.

^+ 4553 ARMORED COMBAT EDITION
Full version of pete w storonskijS mangled fenders: Armored Combat Edition! Drive tanks from six different countries in a demo-derby game with weapons! This FULL VERSION is freely distributible, as long as all files are intact and present. Uses Memory Conservation Protocols to make sure the game will run on low memory

^+ 4554 BLOODFEST
Captive & HiredGuns style 3d adventure

^+ 4555 TRAIN DRIVER SIM V1.6
Profile chart generated in real time showing next 10 miles - Fog, in addition to Dry/Wet - visibility 100 yards, very slippery rail - Data updated and more crossovers added between Crewe and Carlisle - Key press detection improved - Now creates timings for any custom train : If, on the Startup screen, you type in a different Code from the built-in trains in the Save drawer, and then set all other parameters, and then click OK, the program will look in. Trains/ and see if a file exists for that train.

^+ 4556 ZHANDULINHELMI ADV
A Finnish text adventure with some graphics and athmospheric music

^+ 4557 POWEROIDS V1.2
Multitasking Asteroids, raytraced gfx, 1-4 Players.

^+ 4558 INTMERCS
Rebelstart type strategy game. Requires 2MB. For one or two players. Complete with four scenarios.

^^ 4559 WORMS MAPS
These are a buncha maps me and my flatmates made for the amiga version of worms... Descriptions as follows :- TUNNEL.WRM Underground warfare. ISLANDS.WRM Ninja Rope-tastic!. SCREAM.WRM Version of pic i found on AMFormat Gallery. TRIPINTOWAR.WRM Wierd, spacy theme, with shafted palette (Was called NECROMUNDA.WRM in previous release). NECROMUNDA.WRM Ohh..You'll LOVE this one. BEN2.WRM Another shafted palette. But kewl though.

^+ 4560 DUNGEON HERO
Fantastic RPG like Dungeon Master

^+ 4561 ELDRITCH V1.35
Top-view adventure hack-and-slash.

CODE REFERENCES

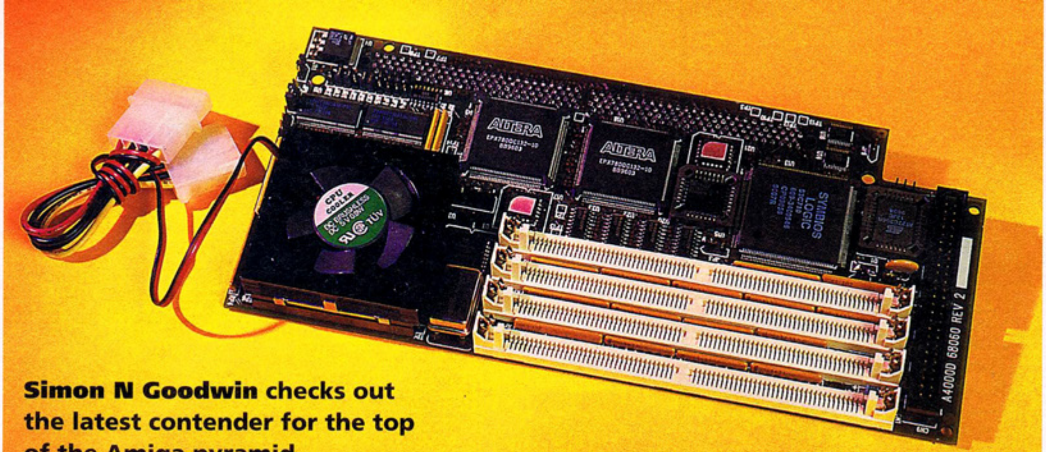
^+ Works on all machines
^* Req Workbench 2.0 or above
^^ Req Workbench 3.0 or above
(ABC) Product has ABC disk (ie, three)

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CATALOG DISKS
FREE WITH EVERY ORDER

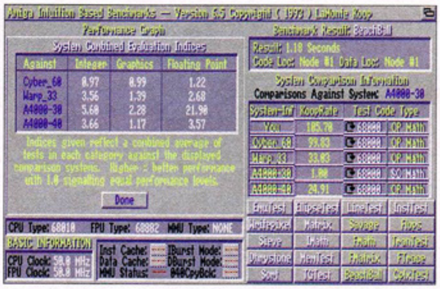
ORDERING INFORMATION

The disks contained within this advert are Public Domain or shareware unless otherwise stated, Please remember that the cost you pay us is only for the duplication and handling costs incurred. not for the programs contained on the disks and that the programs are not free they are shareware. If you like it register it. Some programs are cut-down version of the full programs or time related demo version or freeware. We do not sell the software contained on these's disk.



Simon N Goodwin checks out the latest contender for the top of the Amiga pyramid.

GVP 68060



Amiga Intuition Benchmarks (AIBB's) summary of the performance of GVP's 68060, compared with Commodore, Phase Five and Macrosystem processor cards.

GVP's new 68060 board for the Amiga 4000 bolsters the desktop Amiga in three crucial areas – memory capacity, disk drive and processor speed. The most obvious benefit is the 50 MHz 68060 processor, discussed in detail alongside, but the memory and SCSI advances are just as significant.

The stock A4000 has four SIMM sockets for fast memory. These must be 1Mb or 4Mb for a maximum of 16Mb, and all the same size. The IDE interface supports one or two hard drives or CD-ROMs (with ATAPI software) but it is inferior to SCSI (Small Computer System Interface), which supports up to seven drives. IDE is slower, and holds up the main processor.

GVP's new board includes a top-flight SCSI co-processor with direct access to all Amiga memory. It has four SIMM slots but the GVP ones support single and double-sided SIMMs up to 32Mb in size, and you can mix sizes from 4Mb upwards. The memory interface is also two to four times faster, depending on your SIMMs and original processor.

INSTALLATION

The accelerator plugs into the A4000 motherboard processor socket. It's a single card about the size of a MacroSystems Warp Engine, slightly larger than Commodore's 3640 board but much smaller than a Cyberstorm. It fits easily in both the desktop A4000 and MicroniK tower. There's a four pin through-port to power the processor cooling fan, and a single 50 pin IDC connector for internal SCSI devices.

There are 19 little 'jumper' switches on the board which tell the speed of your memory and other configuration details. Our 68060 had just four pages of inadequate documentation, and we had to call Power Computing before we could get the board to work. A full manual is promised, and should save Power a lot of support calls if it is as good as the GFORCE 040 one.

On average, 50 MHz 68060s run two to five times faster than 25 MHz 68040s. The exact advantage depends on the program, and is most apparent on processor and memory intensive

BUNDLED SOFTWARE

The 68060 comes with the GVP SCSI 2 device driver pre-programmed onto the board, and a disk of utilities. Let's explore the utility disk.

68060 LIBRARY

This turns on features like the second integer execution unit, branch and data caches, and loads code to emulate instructions not directly supported by the 68060 hardware, notably floating point series generation and 64-bit arithmetic. This library is loaded by SETPATCH at the beginning of the Amiga startup-sequence.

FASTPREP

This is GVP's version of the venerable HDTOOLBOX, used to initialise hard drives. Its simplified options make it easier to use than HDTOOLBOX, but not as powerful, or dangerous.

EXPERTPREP

This is the full version of GVP's SCSI drive setup utility, for advanced users. You can still use HDTOOLBOX by supplying the parameter "gvpscsi2.device" so that the program uses the GVP controller instead of the Commodore one.

MEMTEST

This simple memory testing utility has been found invaluable but initially you must make sure that all your SIMMs and jumpers are set correctly.

KSREMAP

This tool makes a copy of Kickstart in RAM, which can be accessed more quickly than the ROM chips on the A4000 motherboard. At best, it can more than double the pace of system routines.

In practice the boost depends on the routine in question and the speed of your SIMMs.

The nice thing about this remapper is that it can be performed at any time and does not require a reset to take effect.

You can also cancel it safely if you wish to reclaim the 512K or megabyte that is occupied by the Kickstart image.

GVP060

This updates Commodore's CPU command with extra features for the 68060, allowing you to toggle the second integer unit, store buffer and branch cache, in addition to the normal code and data cache controls.

tasks such as emulation and rendering. Not everything is accelerated – the speed of AGA graphics is largely determined by the motherboard, not the processor, and floppy disks still spin at 300 rpm regardless of the processor.

GVP supports 'burst' transfers to the Amiga motherboard which can double the speed of Zorro 3 cards, and has a switch giving Zorro interrupts priority over SCSI. This has a negligible cost in drive performance and makes fast modems, samplers and network cards far more responsive, much reducing the risk of buffer over-runs. It is symptomatic of the way the GVP has been designed to give high performance throughout the system, not just in one or two areas.

Benchmark tests show the GVP crunches code at about the same speed as Phase Five's Cyberstorm. Both use the 50 MHz 68060 processor and similar fast memory arrangements.

GVP have the edge in memory speed and Floating Point performance, while Phase Five excel on some graphics and integer tests. The memory advantage requires matched pairs of SIMMs, although you can still use odd SIMMS, with reduced performance. The other differences, measured with AIBB, were small, and probably stem from the 68060 support routines, which are likely to converge with time.

As of version 6.5, AIBB does not support the 68060 and must be fooled into testing what it thinks is a super-fast 68010 and 68882 combination, with the command: "AIBB -c1 -f2". This fudge precludes the use of 68020 addressing modes and pure 68040/060 floating point code, so the AIBB timings – while impressive – sell 68060 boards a little short.

SysInfo does not crash when confronted with the 68060, but gives misleading results, underrating integer performance and exaggerating floating point. Benchmark programs are notorious, and *SysInfo* particularly so as its undocumented 'tests' do not do anything useful.

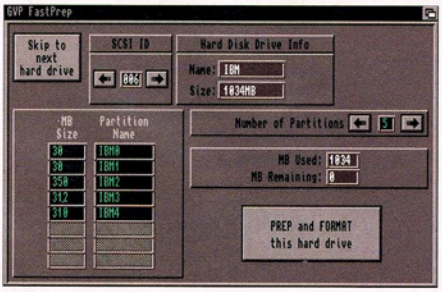
Existing programs need tweaks to make best use of the 68060. Instructions cannot be executed in parallel if the second in sequence needs the result from the first. Compilers can re-order instructions to avoid this bottleneck, but the 68060 does not do this automatically. It's one reason why future 68060-aware code will out-run current programs. Programs optimised for 68060s are beginning to appear, notably for rendering and 3D games.

Like the Warp Engine before it, the GVP board incorporates an NCR53C710 SCSI co-processor. This controls up to seven SCSI devices transferring data between drives and memory without intervention from the main processor. I got sustained transfers at over 4Mbs per second with a cheap 1Gb drive and less than two per cent processor overhead.

The NCR is the most efficient SCSI chip currently used on the Amiga. It supports FAST SCSI 2 drives with transfer rates up to 10Mbs per second and can read and write any part of the Amiga's memory. GVP supply a small but vital utility, *SCSIMaskFix*, to update drives formatted on old Zorro 2 controllers so that they can transfer to all possible addresses.

CONCLUSION

At £749, the GVP board can safely be recommended to anyone held back by the performance of the stock A4000. It's a well-rounded expansion system and – once you get the jumpers set up correctly – works reliably and at most impressive speed.



GVP's admirably simple FastPrep hard disk set-up screen.

68060 HIGHLIGHTS

● Motorola's 68060 is the peak of a 15-year line of compatible processors which began with the 68000. The 68060 is more than 30x as complex as its forebearer, with around 2,400,000 transistors on each chip.

● The 68060 has a fully-static design, reducing power consumption and associated heat. It runs much cooler than a 68040 clocked half as fast, even though it has twice as many transistors.

● Potentially costly 'branch' instructions, which divert the flow of programs, have their own execution unit, so they do not disturb the steady manipulation of data.

● A separate floating point unit works like a 68881 or 68882 co-processor but about 20x faster, thanks to improved design and its on-chip location.

● The combination can process three instructions in parallel, each clock cycle. Couple this with an increased clock rate – 50 MHz on current models, with 66 and 80 MHz versions coming soon – and you get a computer two to five times quicker than Commodore's flagship A4000/040, and perhaps 100 times faster than early Amigas. But the speed of other computer parts, in particular memory, has not increased by anything like as much in the same time. The 68060 can crunch data and code at such a rate that it could easily outrun the rest of the system. The solution is 'cache' – literally 'hidden store' – in this case very fast memory on the chip itself, holding temporary copies of the latest code and data.

● The 256 byte caches of the 68020 and 68030 only accelerate reading. When new data must be stored, delays are likely as the value is transferred to external memory. 68040s and 68060s eliminate most of these delays, at some cost in compatibility. The optional 'Copyback' mode caches updates as they are written, waiting till the memory is free before it writes them back to main memory.

● The 68060 branch cache stores the destination and conditions associated with the last 256 branches so that future detours can be predicted reliably. Twin address translation caches boost memory protection, remapping and virtual memory – techniques built upon the 68060's on-chip Memory Management Unit.

● Memory Management can shuffle memory to and from disk so programs appear to have more RAM than is available – a technique known as 'virtual memory' which trades time for space. Memory Management can also exchange ROM and RAM, and detect and report access to certain addresses.

COMPATIBILITY

As yet the only tool that uses memory management on the GVP is KSREMAP, the kickstart remapper, but Mike Sinz promises an update of his *Enforcer* utility, and others are sure to follow.

Emulators are a potential problem for any new processor, as they tend to need processor-specific tricks. *ShapeShifter* will run as long as you turn off the 68040-specific features. *Amiga Qdos 3.23* works on the 68060, and special versions of NetBSD are circulating on the Net.

Copyback cache is an important performance booster, but can cause trouble. Programs that write directly to hardware may rely on transfers taking place in a particular sequence. Some old 68000 programs use 'self-modifying' code to save time and space, but attempts to write new code are often frustrated by caches. Before running old 68000 software on a fast system you may have to turn off the data cache, and maybe the instruction cache as well. The good news is that almost all software that runs on a 68040 will run on the 68060. The exceptions are programs that give low-level access to processor features, like *MonAm 3*, *Enforcer* and *GigaMem*. These will need updates before they will work.

GVP 68060

DISTRIBUTOR
Power Computing
01234 352207

PRICE
£749.95

SYSTEM REQUIREMENTS
A4000

SPEED ●●●●●
The fastest Amiga yet.

MANUAL ●●
Good on fitting, but cryptic on jumper settings.

ACCESSIBILITY ●●●●●
It couldn't be simpler – just plug it in the CPU slot.

FEATURES ●●●●
The only gap (as yet) is software support for the MMU.

VALUE ●●●●
£750 may seem like a lot of money but it is certainly worth it for the extra performance.

"The 68040 is dead, long live the 68060!"

89%

Apollo 1260

The Apollo range has been extended to include the fastest Motorola processor available. David Taylor checks out the new family member.



The new Apollo 1260 from Motorola. The boards may all look the same and cost the same but there are some very important differences.

The speed possibilities for A1200 owners have mushroomed recently, from the now mediocre 68030 processors to the fast 68040 and more recently 68060s. However, with 68060 processors costing at least £300, the complete boards have remained securely in the realm of the professional, or at least very rich, user. The Apollo range has always managed prices well below other boards but because of the price of the actual processors, this board has been released at only £20 less than the Blizzard 1260.

With this in mind, the usual advantage of the Apollo boards is not really valid. Add to this the fact that all 1260 boards perform at pretty much the same speed and you might be forgiven for thinking that all the boards are the same.

FALSE START

Unfortunately this isn't true. Like the other boards, you have to install a set of software before installing the hardware. Unlike the other boards, the software isn't installed using the Commodore Installer, but some really bad custom software. It is baffling beyond belief why the perfectly adequate system which everyone is accustomed to using has been spurned to use some poor simple copying technique which has little user-configurability and bottoms out on any error, rather than checking and letting you change the destination. You will get it installed eventually, but they could have put better instructions with the manual to stop you having to experiment.

Once the software is installed, it is simply a case of slotting the board into the trapdoor expansion, which is easy enough and it fits slightly better than some of the other, bulkier boards. When you use the board, you'll be amazed at the speed. Swapping from an 020 would make you gape at your new processing power, but even an 030 can't compare to the sort of speed you get from this board. In fact, it's about four times as fast as an 040. General housekeeping is much easier, although hampered by the speed of the custom chips but if you do processor intensive jobs like rendering, then this processor is a boon.

MISMATCH

As with all 060s, there are some software incompatibilities and to try and solve this, there are some options to give better compatibility but it's not 100% successful. Unlike the Blizzard, there's no way to switch the board off without removing it, which is a real bind. Even a jumper would have been useful for the times that you do need to revert to the native CPU.

Because of the extra power consumption of the new processor, you are likely to find that the standard power supply is no longer enough and your system will be prone to crashing unless you upgrade to the Goliath power supply. This is an extra cost you have to consider when buying the board. Other 060s have the same problem, but the Apollo seemed more unstable than the others when using a normal A1200 power supply.

GRAND FINAL

There have been some concerns recently with boards which have been over-clocked beyond the correct MHz, causing software problems. This shouldn't be a concern with the 060s, as they are clocked at 50MHz, which is the slowest 060 manufactured.

As far as expansion, the board can can take up to 32Mb on a single 72-pin SIMM and a SCSI module is supposed to be coming. It should allow you to have SCSI devices auto-booting, although getting hold of a SCSI module for any board seems almost impossible.

With prices of all 060 boards so similar, it seems that other boards have certain advantages, like the off-switch and a sturdier build quality – but that doesn't mean I'd turn it down!

APOLLO 1260

DISTRIBUTOR
Siren Software
0500 340548

PRICE
£574.99

SYSTEM REQUIREMENTS
A1200, upgraded power supply and extra RAM recommended.

SPEED ●●●●●
Zoom! Brrrmmm! Beep, beep! Er, it's very fast indeed.

MANUAL ●●●●
A little detail about installing the software should have been included.

ACCESSIBILITY ●●●●
The board installs easily, but the software is a pain. Thankfully you only have to install it once.

FEATURES ●●●●
Excellent processor, the ability to add 32Mb RAM and SCSI upgrade. It just needs an off switch!

VALUE ●●●
It's fiendishly expensive but then so are all 060's. Only for those that really need the speed.

"Amazing speed, but there are other considerations to take into account."

85%

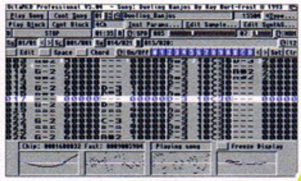
CD-ROM ROUND-UP

It's the latest crop of CD-ROMs, fresh from the fields, brought to your table by our very own Ben Vost.

AMINET 12

EPIC MARKETING ■ 0500 131486 ■ £12.99

I often ask myself why we bother bringing you these *Aminet* reviews. Everyone by now must surely know the qualities that give the *Aminet* CDs such consistently high marks. Is the CD jam-packed with new stuff? Yes, over 770Mb of new stuff is on this one. Is it well-organised? Yes, just like the previous CDs, only now it also has a list of the files that aren't on the CD because their uploaders declined to appear. Does it have a freebie? Yes, two in fact. *OctaMED v5.04* and *Symphonie* (a German eight track module editor). Is it the usual mix of high quality shareware and public domain software that comes out every two months or so? Yes, yes, yes! What more is there to say? We'll just have to pull out something fairly inconsequential and harp on about it for a while to fill the remaining space. Hmm, ah yes. Did you see the superb MPeg animation of Urban Mueller, madcap administrator of Aminet, juggling gig hard drives? It's truly superb, it really is. Honestly, if you buy this CD for no other reason it would still be worth it. It's incredibly incredible... (is that enough?) No, I mean it. Go out and buy this CD now, you won't regret it, I promise. (repeat ad nauseam)



OctaMed should prove popular with those that just buy the Aminet series for the music.



He manages the entire Aminet, compiles the CDs and he juggles? Now that's just showing off...

"What's Urban gonna do when he runs out of modules to fill the CD with?"

90%



The demo of *FontMachine* on this collection is great.

"Great starter pack for DTP enthusiasts everywhere"

91%

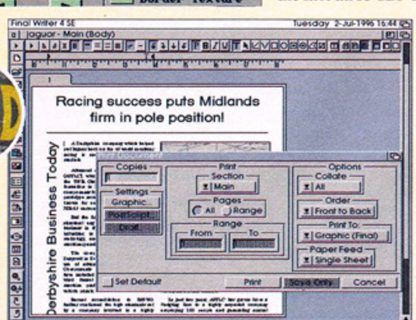
MAGIC PUBLISHER

EPIC MARKETING ■ 0500 131486 ■ £44.99

Four CDs, filled with fonts and clipart, a hundred page sample booklet showing all the postscript fonts and the clipart images (all in IFF ILBM format), *Final Writer 4SE*, *Wordworth 4SE*, a complete installation of *PasTex* (presumably pronounced Pay-stek, judging how Tex is supposed to be pronounced), shall I go on? It's an impressive list of contents and well-organised to boot. This makes Magic Publisher probably one of the best deals on offer this month, particularly if you don't already have a selection of font and clipart CD-ROMs. Both *Final Writer* and *Wordworth* can be run off the CD, saving hard drive space, but they can also be installed and the fonts all have some sort of preview as does the clipart.

The fourth CD in the bundle is actually an archive of the first three CDs' fonts and clipart for use by BBS sysops on their bulletin boards and although it says you get over ten thousand fonts in the collection, you should bear in mind that this means that you get PostScript type 1, TrueType, DMF, Intellifont and bitmap (some of which haven't been translated properly) versions of each typeface, along with a hundred or so colour fonts, a few of which are of truly excellent quality.

In short, an excellent compilation, particularly because of the accompanying booklet.



Final Writer 4SE will allow you to use the fonts and clipart in this collection.

AMIGA DEVELOPER CD V1.1

EPIC MARKETING ■ 0500 131486 ■ £14.99

I haven't seen a CD this empty for quite some time. It's only got 58Mb of data on it, so you might think I would mark it down as being a bit of a rip off, but those 58Mbs are sooo useful to any Amiga developer it would be churlish of me to expect the compilers to have filled the CD with worthless trash just for the sake of it. This CD really is the bee's knees for anyone even vaguely interested in developing applications for the Amiga. Here's a quick rundown on its contents:

CD32 developer package including the 'BuildCD' tool for creating ISO images;
The 2.04 and 3.1 native developer kits;
developer kits for SANA II, Envoy v2 and Inet225;
Includes and Autodocs in Amigaguide format;
AmigaGuide Volumes 1&2 (developer articles);

and a whole bunch of other and third party tools, docs and utilities. As you can see, it may only be 58Mb, but it's a huge 58Mb. There are only two omissions from the CD as it stands:– the first is the lack of any sort of programming language, hardly a problem since most of the people interested in this CD will already have some sort of C compiler or assembler package; secondly, owing to legal wrangles the third edition ROM kernel manuals aren't on the disc, but as the compilers say, they may be on a future update.

AMIGA FORMAT GOLD

"Anyone even vaguely interested in developing for the Amiga should own this CD"

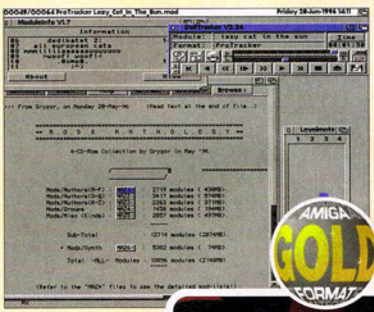
95%



It may only be 58Mb of material but what an important 58 meg...

MODS ANTHOLOGY VOL 1

EPIC MARKETING ■ 0500 131486 ■ £34.99



Very nicely organised, the *Mods Anthology* allows you to play individual Mods from the AmigaGuide file.

AMIGA FORMAT GOLD

"Get down wit' yo bad self with your Amiga!"

95%

What can you say about this anthology? It's big – there's a word that springs to mind, with over 18,000 mods over four CDs in a variety of formats, and it's pretty well organised. *DeliTracker* actually starts automatically if you double click on the 'Click me first!' icon – a temptation many an Amiga owner will not be able to resist – and opens its levels and mod info windows in addition to the main window. By default it has a list of songs already loaded, but this can be changed to the user's favourite by editing a text file. The CD collection comes with a set of Amigaguide files that allow you to search through for your favourite composers, checking their biographies, some of them have even provided pictures of themselves, and clicking on the names of their modules will start them playing in *DeliTracker*.

The collection has been carefully planned to allow access on other platforms and comes with players for a wide range of machines including Silicon Graphics and BeBox. For those sad people who have to contend with 8.3 filenames, like PC owners, the compiler of the CDs, one Gryzor – himself a well-known composer, has put special versions of the Mods into separate directories that allow DOS to truncate the filenames without creating several files with the same (truncated) name.

If you're one of those people who likes to see new modules appearing on *Aminet* CDs and you'd like to know more about their authors, want to hear their other work or just want non-stop music on your Amiga, then this is the collection for you.

AMIGA CD SENSATION

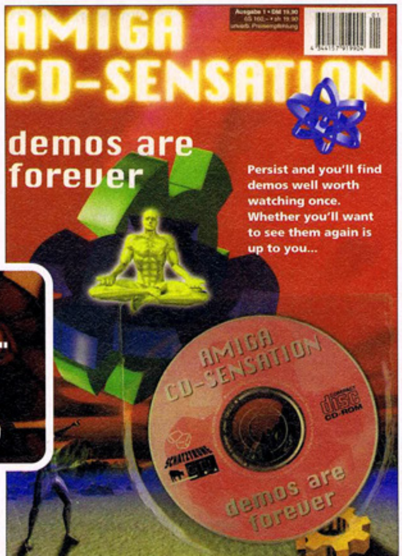
EPIC MARKETING ■ 0500 131486 ■ £12.99

A bit of a change of format. This CD looks like it was designed to be sold off a magazine rack and there's no permanent storage container for the CD, just the wallet stuck to the cardboard. However, I think this was probably intentional as the contents of this CD look like having a fairly ephemeral appeal. In short, the CD consists of demos. Big demos, small demos, some you have to run off floppy, some that don't seem to want to run at all.

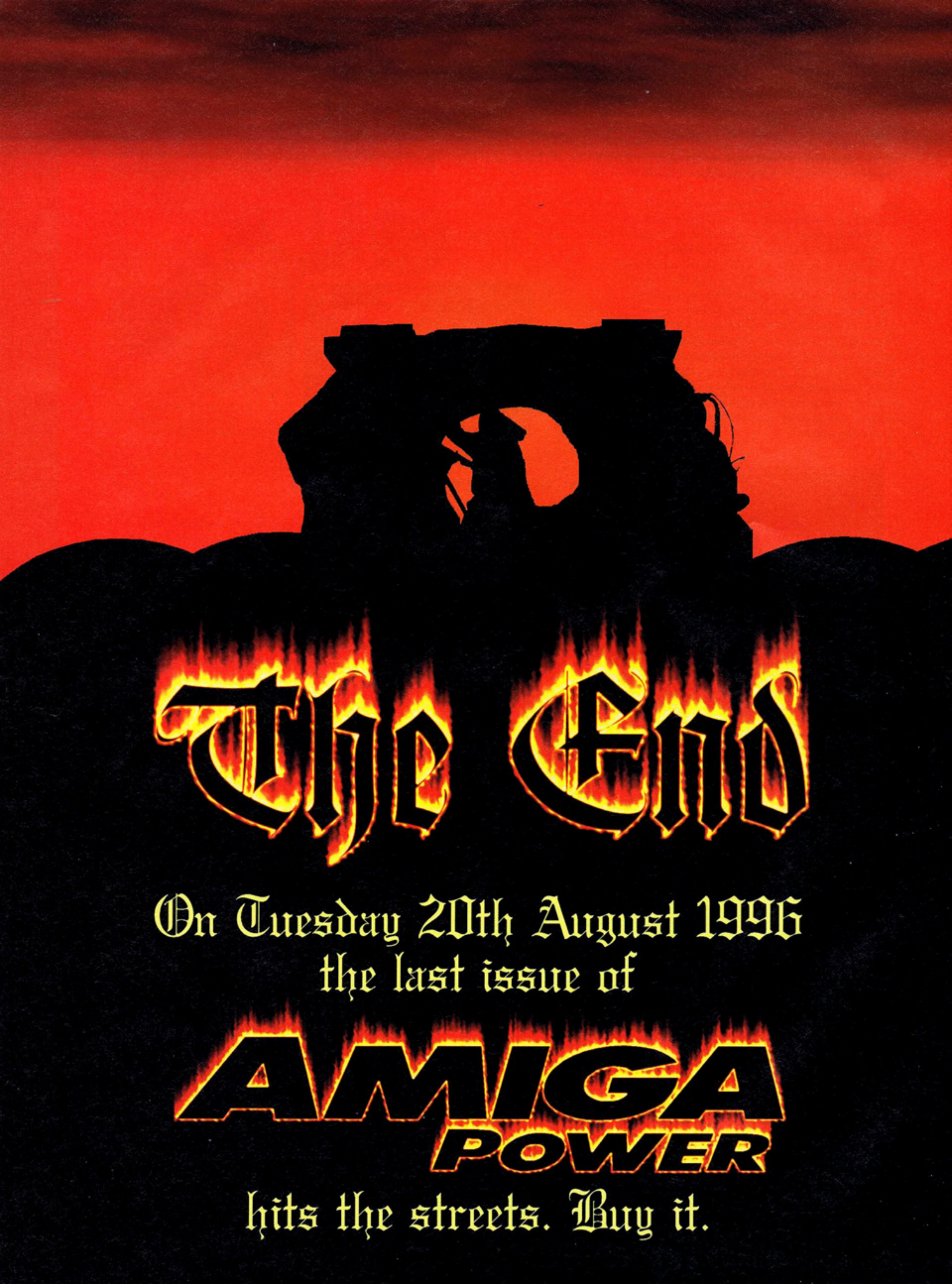
Oddly, although the CD as a whole seems pretty well organised, most of the demos say they are non-AGA in their readme's, even those that are in the 'AGA-only' drawer. I also had a lot more trouble running most of the demos I tried – only a few wanted to work and even those didn't all quit back to Workbench. The only high point of the CD was a really poor Commodore Germany shop demo done in 1993 showing off the graphical skills of the 'new' AGA machines. Unfortunately, all the screenshots of programs you can run on the Amiga were of really old versions that made it look like no-one had made any software for the Amiga in two years, rather defeating the object of the demo. Still, I guess there will be those of you that will drool at getting so many demos on one disc, and if you are one of those types then you should get this CD at any cost.

"No case, poor instructions but loads of demos..."

65%



Persist and you'll find demos well worth watching once. Whether you'll want to see them again is up to you...


The End
On Tuesday 20th August 1996
the last issue of
AMIGA
POWER
hits the streets. Buy it.

Workbench

Life is full of mysteries and the Amiga is certainly no exception. Graeme Sandiford knows all about the quiet strength and willfulness of his favourite machine. So, send your queries to Workbench, *Amiga Format*, 30 Monmouth Street, Bath, Avon BA1 2BW.

BACK FOR THE FUTURE

Sorry if I seem rather stupid but I have been out of the Amiga scene for a good 2 years. I have rarely touched my A1200 but now I'm hooked again. I have had an A500 before but now I would like to upgrade my A1200 without a hard drive. Please could you give me some advice on the following:

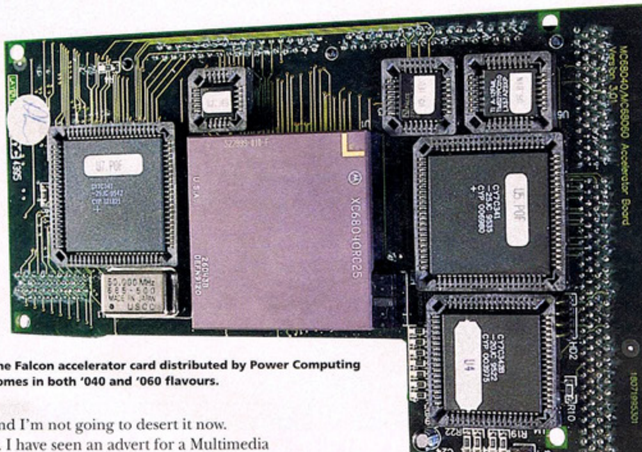
1. I would like to purchase a hard drive but don't know which I should get. What is the difference between 2.5" and 3.5" (apart from the size)? I would like to get a 540Mb one, so please could you give me details of a reliable company.

2. I would also like to increase my A1200's speed and RAM. What would you recommend? I don't have much money – about £300 is the most I could afford. My friend has a board with 4Mb RAM, which runs at 50MHz. Would this be a good buy or are there better accelerators on the market? Again could you please recommend a company whom I could purchase it from with the hard drive.

3. Where can I get *High Seas Trader* from? Most shops don't stock Amiga software anymore but I have been a loyal Amiga owner since the A500 and I'm not going to desert it now.

4. I have seen an advert for a Multimedia Station for the A1200 (by ICS). Is it any good? Will it be compatible with my accelerator (when I get one)?

Paul Hayward
Oxon



The Falcon accelerator card distributed by Power Computing comes in both '040 and '060 flavours.



High Seas Trader **– has it just sailed off into the sunset somewhere? Perhaps you know where to find it.**

1. The Amiga A1200 was designed to have 2.5" drives fitted internally, rather than 3.5" drives. Most modern 3.5" drives are very slim and can be squeezed into the case. They are faster and cheaper than their smaller counterparts. Eyetech (01642 713185) are one of many companies which can supply kits of all the cables you need, and full instructions.

2. There are many cards which will satisfy your needs, and you should check out Issue 64 of our sister title Amiga Shopper. *It contains a comprehensive round-up of almost all the A1200 speed-up cards available. The Magnum and the Blizzard were favourites.*

3. Check out Amiga Power *for adverts from the remaining Amiga games dealers. They may have a copy of the game you want on a shelf somewhere.*

4. You can discover if the ICS tower is any good by reading the feature on page 21 of this issue.

THE SX FILES (CONTINUED)

I am writing concerning the reply you gave to James Macleod, in the July issue, about fitting a hard drive into the SX-1 cartridge. You fit the hard drive internally not externally as stated.

To fit an IDE drive you need a 5mm nutdriver, a philips screwdriver, 44 conductor IDE cable 2 inches long and a 2.5" hard drive. The hard drive fits under the main board.

Continued overleaf ➡

SEEDY RAM

I have a CD32 and SX-1 with an external floppy drive running from the standard CD32 power supply. I have recently discovered just how slow my CD32 is, so I was wondering if there is any sort of accelerator available for the CD32.

I am also thinking about purchasing a 4Mb RAM expansion for the SX-1. Would this speed up games and programs, or even cut down on the amount of disk swapping or something? Could I put some fast RAM in my SX-1? How much is it for say, 4Mb of fast RAM and where can I get it from as it's not available in Special Reserve?

Jonathan Barton
Lancashire

There isn't an accelerator available for the CD32 because there is no equivalent to the A1200's Trapdoor slot. However, fitting RAM to the SX-1 will help.

Any RAM added in this way will be 'Fast RAM' and will improve performance: some programs will run twice as fast as before. You don't need a special expansion card, only a standard 72-pin 4Mb SIMM which should cost you less than £50 at today's prices.



Unfortunately there is no accelerator available for the CD32 but you can fit extra RAM to the SX-1.

PC CD OK?

I have just finished reading the ATAPI/CD-ROM article (*AF*86) and it has got me thinking. I would therefore be extremely grateful if you could answer the following questions for me.

1. I am interested in *PC Task* V4.0 from Wizard Developments. I would like to be able to run PC programs using my beloved A1200, but was wondering whether I would be able to run most PC games, with this program.
2. Would I be able to use a CD-ROM installed using the method shown in the ATAPI article? From what I can gather the ATAPI software would need to be running to use the CD-ROM, which wouldn't allow me to use it when running *PC Task*.
3. What would be the minimum speed/size of accelerator/RAM needed to make *PC Task* run at an equivalent speed to a 486/66? Would an 030/40 with 8Mbs be enough?
4. As you can no doubt gather, I am interested in playing PC games. Is there anything else I need to consider in order to make this possible. I don't want to lose my Amiga as I have some excellent games for it and to be honest I don't see the point in spending £1000 on a games machine, but all the decent software (games) is being released on the PC (*Command and Conquer / Warcraft / Settlers 2*).

Paul Jones
Bristol

1. I have yet to see the latest version of PC Task *-- version 4 -- but I gather it will emulate the 386 processor rather than only the 286 as with* PC Task *version 3. This means that it will theoretically run a great deal of PC software, including Windows 95 and most games for example.*

But, and it's a very big but, as a software only emulator it still won't run very fast. In fact, it will run so slowly as to make it next to useless for games and large, Windows based applications. Don't expect to run Duke Nukem on an A1200.

2. That depends on the drivers supplied with PC Task. *Version 3 included a driver which worked very well indeed with connected SCSI CD-ROM drives.*

3. I really don't believe that an Amiga accelerator exists which could even get close to a PC of these specifications. Remember that the Amiga is having to run a program which pretends it is an Intel processor, and then run the application software (Windows, games etc) on top of that. It's not going to be fast.

Obviously a fast processor and lots of Fast RAM will speed things up. It's extremely impressive to be able to emulate a PC in this way, and if you need to run a particular program it can be a life-saver.

4. I would have to suggest that you stop even considering trying to emulate the PC for playing games, as it's a dead-end approach. There are no hardware emulators about at the moment, and so you should consider the Siamese system from HiQ which makes use of a real, live PC. We reviewed the Siamese system in issue 86 of Amiga Format.

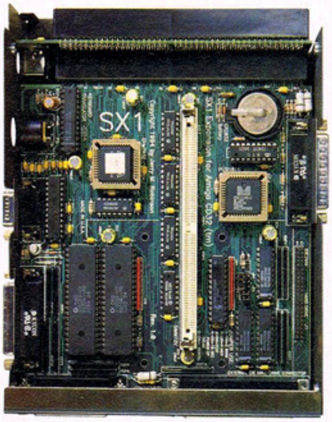
This is about the most complicated software you can expect to run at a reasonable speed on a bare A1200 with *PC Task*.



← Remove the 10 hex screws around the connecters, lift the front card edge first and remove from case. Don't worry if the shield falls off, just refit them at assembly time. Fit the drive using screws and spacers – watch that the spacers are not too big. Fit the cable to the drive and feed it around the board to the IDE connector. If the cable has a stripe down one edge fit this to pin 1 (marked) and reassemble.

I have an Amiga 1200 with a 4Mb board in the trapdoor and a 170 Mb Overdrive 35 hard drive in the PCMCIA port. Can I fit the Golden Image PCMCIA controller featured in the ATAPI Days article (July issue) between the 1200 and the Overdrive so allowing me to connect a CD drive to the same port?
Or is there a way to connect anything else to this port?

David Hope
Lanarkshire



The SX-1 will take *some* IDE drives internally, but it isn't very straightforward.

Well, we did say that 2.5" drives could be fitted internally, but thanks for the comprehensive reply anyway

Huh? There was no Golden Image PCMCIA controller featured in that article. The Golden Image kit consists of cables and a box. Perhaps you are referring to the PCMCIA card from AlfaData which was mentioned. This card provides another IDE interface – but no, you can't use more than one PCMCIA peripheral at once for the simple reason that you only have one PCMCIA slot. And no, you can't buy a box to provide two PCMCIA slots – even if you could, the Amiga wouldn't support it.

The good news is that you should be able to use the internal IDE interface (i.e. the one which every A4000, A1200 and A600 has as standard) with the ATAPI system to connect a CD-ROM drive. You will need to be careful with power consumption though.

PACKAGE HOLIDAY

Your article in *Amiga Format* 86 July 1986 with the title "join Us" on page 17 was quite informative and especially easy to read. Being a graduate from the University of North Carolina at Ashville (USA) with a major in Computer Science I have been actively involved in PC networking since 1986 in the USA and since 1990 in Greece.

At the beginning this year I started looking into the Amiga range of computer systems, and through the first part of your article I obtained useful resources and addresses to get in contact with. I am currently developing a hotel management system using Amiga computers because the overhead costs are quite low on



If you really want to know all about networking, you should take a close look at issue 86.

such systems. One particular aspect of Amiga computing which I haven't read much about is remote access, via telephone lines, of an Amiga computer source.

You briefly mention such access as far as simple file transfers are involved. I need remote Workbench access, as well as remote printing, mouse and keyboard access. I need to be able to use hard drives and CD-ROMs. The remote aspect is important especially for variables that change on a daily basis within a hotel (exchange rates, trip rates, airline/boat/bus schedules etc, etc).

The situation is quite easy using PC systems but I am not familiar with the availability of such devices for the Amiga range of computers. Here in Greece no one can point me to such a program. I will be working mainly with Amiga 1200 machines.

Thank you in advance for all your help. I really am in dire need and wish to know all the aspects and features of Amiga computers before I finish my development and switch over to the Amiga line of computers.

Nickolas Culianos
Greece

The Amiga is very popular in hotel environments because it offers good graphics support at a low cost. I would urge you very strongly to get in contact with SCALA who are renowned for developing applications like these. If you have Internet access, visit their Web site on http://www.scala.com or you can reach them at their head office:

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Or International Headquarters
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Similar features were available from a package called MediaPoint. *I'm not sure if this package is still supported but I found a telephone number for you: Tel: +31 2290 17638*

Setting up the system you describe by yourself would be a very interesting task. As you know, remote access on the PC is quite straightforward but I have yet to hear of any similar software on the Amiga. You really want to be able to dial into a remote Amiga using modems, and then assume complete control over that remote computer, and that is going to be difficult if not impossible to implement.

Here is how I would go about doing it in a slightly different way. First of all, your 'front end' Amiga is situated in a hotel, and it is connected via a modem to a telephone line. This is the Amiga which will display exchange rates, tour details and so on. You will need a program to display this information, and I would recommend you use CanDo *to create a suitable application. The* CanDo *program would display details, cycling through pages or providing information on demand for any users.*

An important part of the CanDo *program would be an ARexx script which is linked to a comms program such as* Term *or* Ncomm. *These are two terminal emulation programs which use ARexx and have very good script handling facilities. The comms program runs in the background, and can detect the modem ringing. When it does, it answers the telephone, connects the modem and allows you to remotely update the information. You can sit in your office miles away, using another computer to feed in new facts. The script then passes the information to the* CanDo *program which updates its pages.*

As I'm just back from a lovely two week holiday on nearby Corfu, I can safely say that if you need more help, please don't hesitate to ask. Or indeed if you get the urge to pay for the plane fare and put me up for a few weeks, feel free.

WHICH DRIVE?

I have just upgraded from my old bog standard A500+ to a second hand, never the less brilliant, A1200 with a Citizen ABC Colour printer as my only peripheral. As you can guess I am fairly new to the world of Amiga home computing, so I have a few questions to ask you:

1. I can get cheap PC 3.5" internal hard drives e.g 630Mb at £129.99 or a 850Mb at £169.99. If these hard drives will work in my A1200 which one should I opt for?

2. Instead of buying a CD-ROM drive, such as the Amiga 1241 Q-Drive, would I be better getting a CD^{32} and linking it to my Amiga via the Communicator linker which is available in this magazine?

3. When the start-up sequence appears on screen what do the numbers 3.00 ROM and 39.106 mean?

Graham Mitchell
Fife

1. As long as the drives are IDE standard they will work with the A1200, although as they are not 2.5" drives you will need a mounting kit such as the one supplied by Eyetech Ltd. Either drive will suffice, it simply depends on how much storage space you are going to need and how much you want to spend. To put sizes into perspective, many users still get by using 80Mb drives and most wouldn't fill 630Mb.

2. Not really. A CD^{32} drive linked via Communicator (which is a serial link) will run much more slowly than one connected directly via the PCMCIA or IDE ports.

3. They are version numbers: you are using an Amiga with Kickstart ROM release 3 and OS release 39.106 – which is up to date enough for most folks.



A hard drive is more or less essential for retaining the sanity of the modern-day Amiga user.

IF YOU HAVE A QUERY...

At *Amiga Format* we aim to answer as many questions as possible. Unlike some magazines, we don't just concentrate on our areas of expertise – we take on all your problems (as long as an Amiga is involved).
Here are a few tips on sending in questions:



Graeme Sandiford

- **Be concise.**
- **Detail the actual problem as best as you can.**
- **Describe the events that caused the problem.**
- **Give full details of your equipment.**
- **Make sure your question is relevant and wouldn't be more easily solved by contacting the dealer from whom you bought the goods.**

Bear these points in mind and fill in, photocopy, or copy the form below as best you can.

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An Internet Update

ON THIS MONTH'S CD

Darren Irvine isn't too hyper this month so rather than having a moan about the Net he takes a look at the latest things that have been happening.

Unfortunately there hasn't been too much in the way of new Amiga software hitting the Net recently. So this month I'll make use of the breathing space and give you some information and details about a couple of new sites that may be of interest to Amiga users.

SAD (L)USER OF THE MONTH

I'm not going to say too much about this month's victim, except that, in his defence, he could offer a plea of "Living in Norway", as possible mitigating circumstances. His name's Kolbjörn Barmen, and he actually puts forth some meaningful and well reasoned arguments in some of the Amiga related Usenet newsgroups. Unfortunately he opens himself up to massive criticism from People-with-a-Clue(tm) by having the message "I met the Amiga and fell in love..." in his signature and repeated again on his Web page. Need I say more? I think not.

DOOPSI

If you are an Amiga game developer working in the adventure field, you will almost certainly have already heard of Doopsi, the object oriented development system. If not, it's basically an object-oriented adventure development system, that incorporates a suite of editors and makes creating a complex adventure game fairly simple. It includes things like an "Anim Workshop" to help with the graphics, a "Path Editor" to define the way in which the characters in the game can move about, and a "Dialog Editor" which can control the way in which the various characters react to conversation.

Now there is also Doopsi information online via their Web pages. Although they are an Italian company, the site has full English documentation, so there isn't any problem getting at the information. The URL you need is:

http://www.intercom.it/~fsoft/DOOPSIWEB/index_E.html

AMIGA WEB DIRECTORY

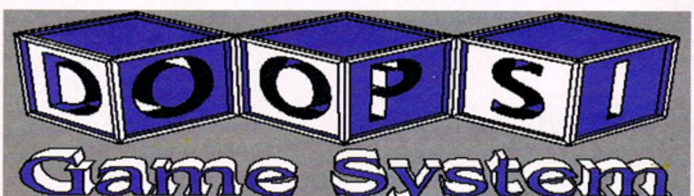
I may have mentioned this site before, but it is worthy of repetition for a number of reasons.

VISCORP NEWS 1

At the time of writing, the latest news on the Net concerning our favourite American company is that Viscorp and Emerson Radio Corp. have signed a Letter of Intent, which grants Emerson the North and South American, exclusive distribution and sales rights to Viscorp's interactive Internet television set-top device, the Universal Internet-Television Interface (UITI), and the UITI-TV interactive "smart" television set.

Terms have not been disclosed, pending a definitive agreement. However, pursuant to the letter of intent, Viscorp would be granted warrants to purchase up to a maximum of one million shares of Emerson common stock at an exercise price of $6 per share. William Buck has stated that the Amiga-powered UITI will "...dramatically expand the capabilities of the family TV set by providing TV viewers with a host of services like email, on-line chat and Net surfing".

Given the seeming ability of some American users to have less than their fair share in the "Having a Clue about their own Computer" stakes, I'm already anticipating the day when someone "Net surfing" with one of these new boxes wades into comp.sys.amiga.advocacy and starts a lengthy conversation about how much better his UITI is than one of those poxy old Amigas...



If you are interested in developing games using the Doopsi system you can find information on their Web site.



The Amiga Web Directory is a great resource that should definitely be added to your Browser Hot List.

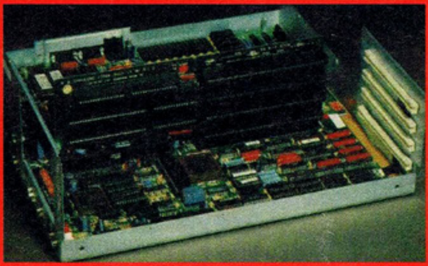
VISCORP NEWS 2

If you are interested in finding out how Viscorp is doing financially, you can point your Web browser at one of the ticker services that provides real-time data on shares on the American Stock Market. For instance, check out the following URL: http://qs.secapl.com/cgi-bin/qs?tick=vicp

VISCORP (VICP) Nasdaq			
Last Traded at	11.2500	Date/Time	Jun 28 9:32:36
$ Change	0.1300	% Change	1.17
Volume (000)	0.1	# of Trades	1
Open	11.2500	Previous Close	11.1200
Bid	10.7500	Ask	11.2500
Day Low	11.2500	Day High	11.2500
52 Week Low	5.0600	52 Week High	11.3700

See how well the company controlling the Amiga's fate is doing on the American Stock Exchange.

BIZARRE WEB SITE OF THE MONTH



Oh-err missus! Computers with their kit off! If this is the sort of thing that gets you going then check out the hot action at the Computer Porn Web page.

I've been using the Internet for some time now, and I like to think that I've seen a lot of weird stuff. Occasionally however, I find a site that makes me despair about the depths of human depravity. If nothing else, I thought at least our favourite computers and their peripherals were safe from the hands of the filth-mongers, but alas, I was wrong. I urge you all to check out this evil Computer Porno site and see what vile acts have been perpetrated on helpless creatures such as the Amiga 3000T. http://www.ts.umu.se/~balp/ComputerPorno.html

Firstly, the links contained in the Amiga Web Directory are constantly being updated, and secondly, it is a nicely put together site that really ought to be on the Hot Lists of all Amiga Web browsers.

As well as links to just about every useful Amiga site on the Web, the Web Directory also has some extremely useful Amiga News sections and links to other resources maintained by the Champane-Urbana Commodore Users Group. The main URL for the Web Directory is:

http://www.cucug.org/amiga.html

MBENCH

Almost since the Amiga first appeared on the scene, there have been various systems designed to enhance or in some way replace the Amiga's native GUI, Workbench.

MBench falls into the latter category, and is an in-development attempt to produce a replacement for Workbench which still retains the Amiga look and feel of the original, but which is more efficient and has greater functionality.

MBench has been designed to be internally multitasking, and has improved features such as a user definable quick start menu for launching programs or scripts.

MBench should be compatible with most programs that run under the existing Workbench. MBench emulates things such as AppWindows so that programs shouldn't be able to tell if they are running with MBench or Workbench.

MBench may well be available by the time you read this, and you can find out more information at:

http://members.tripod.com/~MAHewitt/mbench.html

NEW SITES

Although I'm sure you're all perfectly capable of surfing the Net and finding all kinds of interesting Amiga related sites yourself, occasionally I get sent details of new sites that are not yet on general link pages and search lists, and sometimes I find obscure resources through sheer persistence. Here are just a few.

Firstly, if you are one of the lucky Amiga owners with a CD-ROM drive and you have the ability to pay for stuff sent from America, you might like to check out the online CD-ROM library at:

http://www.amigalib.com

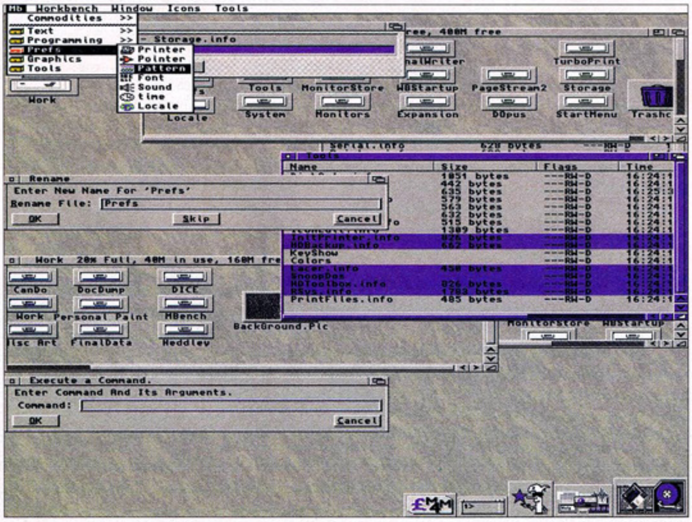
If on the other hand you prefer to download your software directly from the Internet in the form of shareware, check out Bevelstone's home page at:

http://www.login.dknet.dk/~bvlstone

As a general interest page to see what can be achieved when designing Web pages on the Amiga (and also of interest if you are an Amiga musician) is Paradise Decay's homepage which can be found at:

http://www.logicnet.co.uk/ParadiseDecay

That's all for now. See you next month.



It's not quite ready yet, but MBench promises to be an interesting "alternative front end" for the Amiga's OS.

WEB NON-SADNESS



One of the admittedly increasing number of Amiga Web sites that are getting their act together and designing decent pages.

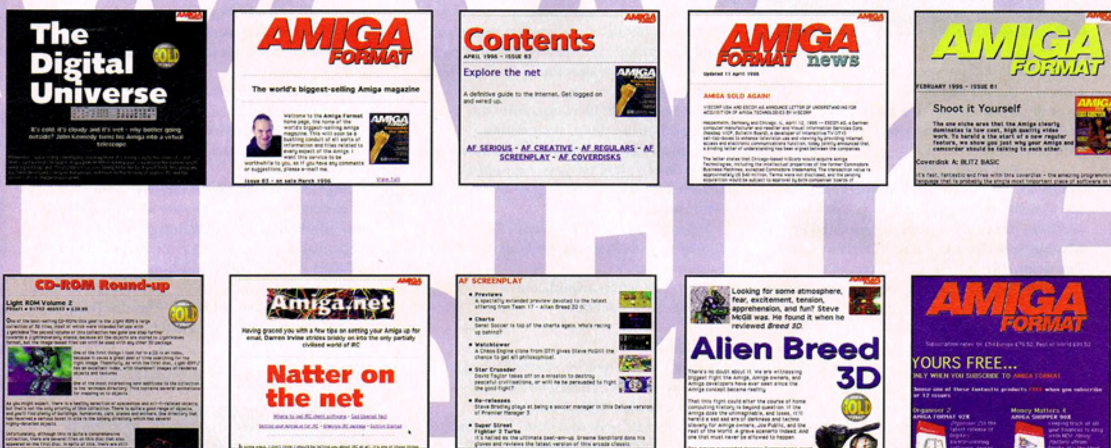
After my feature on the general sadness of all things on the Internet (I don't really believe that, but I'd been drinking too much coffee and Red Bull that month) I've received several "comments" objecting to my round up and criticism of various parts of the Net. Most of these comments have been of the "Hey, look at my site, it's actually pretty cool, and not sad in any way" variety, and in some cases they were correct. One such site that deserves a mention (although I'm pretty sure that I've mentioned them somewhere before) is the Pure Amiga Web site.

This is a pretty useful site with lots of links to other Amiga web resources, as well as some interesting articles (hardware and software reviews, FAQs etc). There are some interactive features too, such as a chat room, and best of all – the whole thing has been put together using decent HTML and looks quite smart. If you want to check it out, the relevant URL is: http://www.netlink.co.uk/users/PureAmiga

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Point your World Wide Web browser at:



It's phenomenally popular – in fact it's one of Europe's most popular web sites. Not only can you view the homepage of your favourite magazine, browse through back issues and follow links to homepages of Amiga developers, but there are also regular news updates from around the Amiga scene as well as a daily world news service. Try it now!

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Organiser 2 is the latest release of Digita's award-winning software. We gave it a stonking 92% in the February issue and gave you a time limited working version to sample on the coverdisk.

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NEW OFFERS



ALIEN BREED 3D
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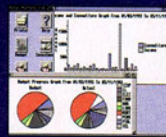
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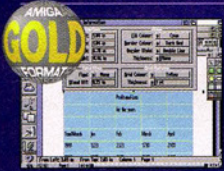
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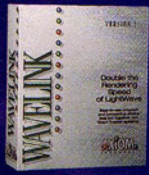
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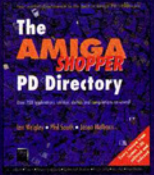


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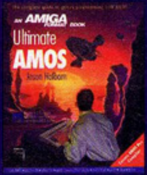
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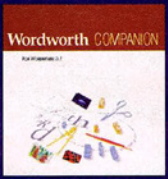
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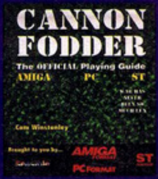
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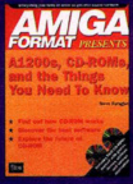


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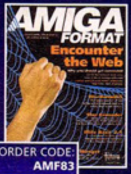
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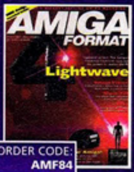
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Workbench Add-On Volume 1

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The official developer CD from Amiga Technologies contains all the material you need to start developing software forAmiga computers. This includes: The CD32 developer package. In addition to the original five disk set distribution you will find the "Build-CD" CD writer package Packages contributed by 3rd parties: The WBPath and ActionFSSM packages, courtesy of Ralph Babel; The Envoy v2.0 developer kit, courtesy of IAM, Inc.; The INet 225 developer kit, version 2, courtesy of Interworks, Inc.; The Kiskometer package, courtesy of Angela Schmidt; The Enforcer v37.64, courtesy of Mike Sinz. Information in support of forthcoming operating system developments. Additional developer material: BOOPSI gadget and image classes; The AmigaOS 2.04 example code, as part of the original 2.04 Native Developer Kit; The RKM 2.04 code examples; The complete set of registered IFF forms; IFF example and stress test files; All IFF packages released by Commodore-Amiga, Inc., covering 1986 through 1992; The camd v37.1 MIDI developer kit; The SANA-II standard package and developer kit; The Installer v43.1 package. International support material: Sample text using the full ISO-8859-1 character set; Translation guidelines. The updated 3.1 Native Developer Kit: "C" and assembly language header files, linker and runtime libraries; System documentation and tutorial texts; Example code covering the Amiga OS 3.0 and 3.1 features; The NewIFF v39 package; The AmigaGuide and DataTypes documentation and example code. Reference material: The collection of AmigaGuide Volume 1 articles, covering Spring 1987 through January/February 1989; The complete AmigaGuide Volume 2 articles in AmigaGuide format, covering January/February 1990 through March/April 1993; also included are the printable issues in PostScript and PageStream format; Hardware related articles; The Includes & Autodocs in AmigaGuide format. £14.95

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Aminet Set 1

Aminet is the world´s largest collection of freely distributable Amiga software. Up to 10.000 users access the vast archives ervery day and countless programmers publish directly via Aminet. Until recently access to Aminet was restricted to international network users. With Aminet Set 1, consisting of 4 CDs, the complete archive is published the first time. This CD-ROM-collection, which is dated January 1995, offers an almost inexhaustible reservoir of top-value Shareware. A wide variety of programs is included: Applications, Games, Demos, Pictures, Mods, Animations, Developer-Material, ... It contains approximately 4 gigabytes of software in 12.500 archives and you will enjoy the comfortable user-interface. £29.95



Aminet Set 2

AMINET SET 2, dated November 1995, consists of approximately 4 gigabytes of software in 12.000 archives. Whether you like applications, games, communications or programming, the SET gives you all you need. Easy to use index files and search facilities make accessing it a pleasure. £34.95



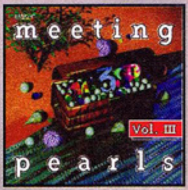
Aminet Set 3

AMINET SET 3, dated July 1996, consists of approximately 4 gigabytes of software in 9.000 archives. Also included are full versions of Imagine 4.0, XiPaint 3.2, OctaMED 5.0 and some commercial games. Whether you like applications, games, communications or programming, the SET gives you all you need. 95 MB Utilities, 79 MB Documents, 408 MB text software, 12 MB Disk/HD tools, 7 MB Hardware related, 756 MB Pictures & Animations, 208 MB Graphics software, 394 MB Graphics & sound demos, 563 MB Games, 64 MB Miscellaneous, 685 MB Music modules, 28 MB Music software, 131 MB Communications, 91 MB Development Software, 88 MB Business software. Easy to use index files and search facilities make accessing it a pleasure. £39.95



Gamers' Delight II

This CD contains 1070 games for the Commodore Amiga from differing categories. Action, Jump & Run, Card Games, Puzzles, Strategy Games - a whole range of computer entertainment awaits! Gamers´ Delight will hold you captivated for hours and guarantees long-lasting pleasure. 70 games are commercial versions - no public domain & no demos! This CD can be run on any Amiga with CD-ROM drive,1 MB free memory and Joystick/Joypad. £26.95



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The Meeting Pearls Volume III contains 650 MB of the finest FD software via a special user interface, which has been created to allow you to find the program of your choice with ease. The contents: 10 MB Packer, Cruncher, Archive Programs · 3 MB CD-ROM Utilities · 21 MB Communication and Network Programs · 5 MB Debugging Tools · 29 MB Development Tools · 13 MB Floppy, Hard Disk ans SCSI Programs · 8 MB Educational Programs · 9 MB Games · 35 MB Graphics Programs · 39 MB Internet Movie Database, Updated Version · 7 MB Midi Tools and Programs · 27 MB Mods · 12 MB Music Programs · 21 MB Pictures · 13 MB AmiTCP and more for Networking · 60 MB Documentation, CD-ROM Databases, etc. · 96 MB PasTeX 1.4 - not previous available on any CD-ROM · 15 MB Utilities · 30 MB HTML-Pages · Collections of datatypes, benchmark programs, icons, programs for amateur radio and electrical/electronic engineering are also included. £9.95



Aminet 12

Still available! £14.95



Aminet 13

Aminet CD 13, dated August 1996, consists of approximately 1,1 gigabytes of software in 2400 archives. Since the release of Aminet CD 12 more than 800 MB new software has appeared. The current edition has a special focus on animations, several hundred animations from the internet were included. User friendly access software makes the Aminet CD 13 a pleasure to use. £14.95



XiPaint V4

XiPaint 4 is the new version of the leading edge, 24-bit paint program. It's suited to the demands of novice and expert alike, and within a short time, you too will be able to produce colourful and creative art in 16.8 million colours. This version of XiPaint features animations as well as easy-to-use raytracing-capabilities.
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NetNews Offline Vol. 1

NetNews Offline Vol. 1 is the first disk of a new bimonthly published series of Amiga CD-ROMs which contains all Amiga-related newsgroups from the internet. Every volume features about 50.000 articles which contain hot rumours, important information about all aspects of the Amiga, press-releases, discussions and flame wars, ... A newsreader is included. NetNews Offline is the cheap alternative of getting in touch with Usenet. £14.95

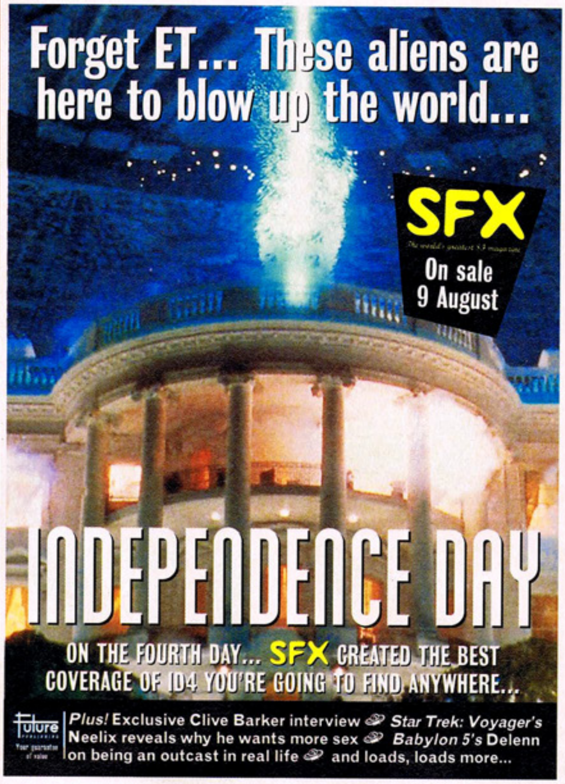
All products are available in your local Amiga-shop or through national mail-order-companies

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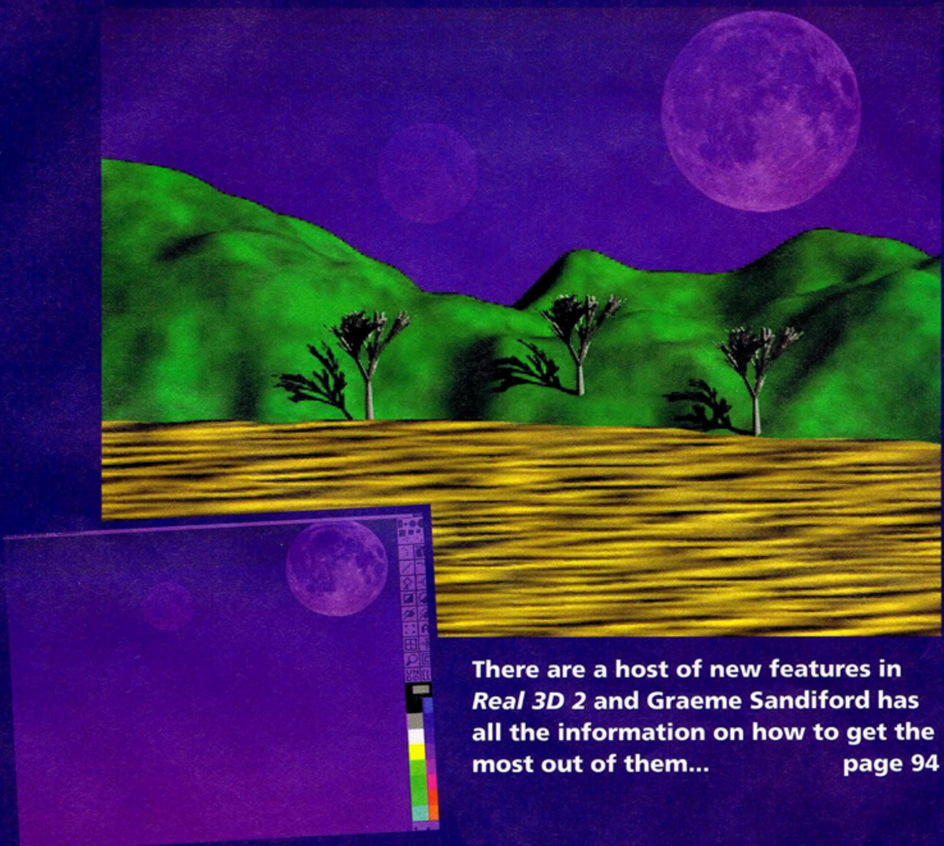
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AF CREATIVE



There are a host of new features in *Real 3D 2* and Graeme Sandiford has all the information on how to get the most out of them... page 94

AMIGA FORMAT ASPIRING TALENT



Nick Veitch

The tutorial section of this magazine is all about making the most out of your machine. You may have all the equipment and you may have plenty of ideas – all that you need is a little guidance. We've all got a creative streak in us somewhere and sometimes it just needs a little nudge to get us started. So, if you're a budding musician or an aspiring computer artist then just turn the pages and read on – and if there's anything that you would particularly like to know about or any areas that we haven't covered then please do get in touch with us at the usual address and let us know.

TUTORIALS

90 INTRODUCTION TO THE INTERNET
Since the explosion of the Internet there has been a host of new mail systems – after all where would we be without email – and **Darren Irvine** has some tips on finding a package to suit your individual needs.

92 OCTAMED TUTORIAL
It's time to make some music. **Darren Irvine** leads you through the on-screen and menu based options and shows how to combine blocks together to form a song.

94 REAL 3D2
Graeme Sandiford has been concentrating on some more of the new features and this month it's time to learn about fractal-based landscape and tree generators.

96 BLITZ TUTORIAL
We've finally created a Window larger than our screen display so now **John Kennedy** shows how to include it in with the rest of the HTML document.

Amiga.net **TUTORIAL**

It's Good to Talk...

Arguably the most important piece of Internet software, Darren Irvine has some useful information on email systems.

ON THIS MONTH'S CD



Demon's own Mail system can be made MIME complient using the predecessor to *MetaTool – MetaMail.*

The most important piece of Internet related software that you will ever need is probably a mailer. Sure, Web browsers are all very well, and you can argue the relative merits of those available, but if you couldn't send email, you'd soon get pretty fed up.

Only a couple of years ago the choice of email system for the Amiga was extremely limited, but recently a wide range of systems have become available. This isn't an all inclusive round up of all the mail systems available but it will endeavour to cover some of the systems that have been around for a while and that are easy to install and get running.

DEMON MAIL

If you are a Demon customer, the supplied *AmiTCP* setup should have neatly installed Mail, along with the mechanism for sending and receiving mail (using Mailkick). In the case of some other ISPs, who also support SMTP delivery, then you should be able to adapt Demon's installation kit. If however your Service Provider can only deliver mail to your system using POP3, then you'll need to get hold of another program called *AmiPOP* to retrieve your mail. Installing *AmiPOP* is really only a matter of unarchiving and setting up a few environment variables – the supplied documentation is excellent. Note that almost all archives of *AmiTCP* come with a version of "sendmail" which is used to transmit outgoing mail from your system.

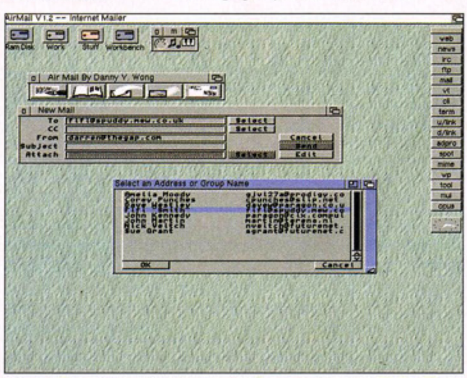
UNIX PORTS

Until fairly recently the only alternatives to using "Mail" were a couple of Unix ports, called *Elm* and *Pine.* Both of these programs have come forward leaps and bounds in their latest incarnations, and if you are used to either on a Unix platform then installing on your Amiga effectively avoids having to learn new software. However, neither of them is really up to scratch in terms of Amiga-style user friendliness.

AIRMAIL

AirMail is a fully featured system, catering for everything ranging from receiving mail, through to an address book and mail folder system to actually sending mail off again. It's also fairly straightforward to install and get running, making *AirMail* a pretty good choice for the newcomer to email systems.

When you first run *AirMail,* a toolbar pops up on your Workbench with five icons. These control the setting up of your address book, sending and retrieving mail, and viewing your in and out folders.



Sending an email using *AirMail* couldn't be simpler – just click on the appropriate icon and fill in the blanks.

The address book is particularly well featured, with the ability to segregate users into any number of different groups. When you come to send a new mail, the recipient of your message can be selected from the address book that you set up. The actual messages themselves are composed using the external editor of your choice.

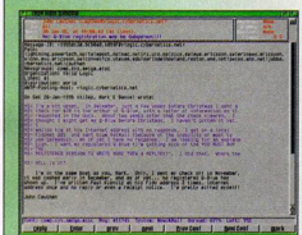
Support for automatically UUDECODEING incoming messages is also available, which can come in handy if you are in the habit of receiving binary files such as graphics files by email. This can only go so far however, and *AirMail*'s one downside is the lack of MIME support.

METATOOL

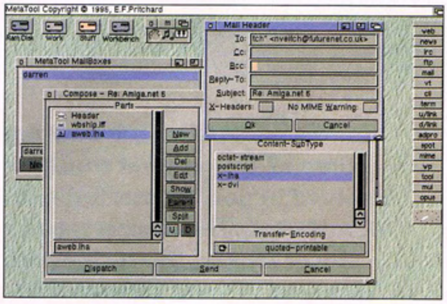
This is where *MetaTool* comes in. The original version was a MIME message compiler, and required you to have all of your email system already installed, including the send and receive mail programs and an actual mail reader/editor. The author has now expanded this original system into an almost completely full-featured system.

ALTERNATIVELY...

If you want a mailer with a lot of functionality which can also support things such as FidoNet and Usenet news, then you might want to take a look at *Thor.* The downside of *Thor's* flexibility is that it does take quite a bit of effort to set it up, and so isn't really completely suitable if you are a complete newcomer to the Net.



***Thor* is great if you want support for a wide range of different mail and news applications but is not the easiest program in the world to install.**



When replying or sending a new mail, ***MetaTool*** **comes into it's own, with it's drag and drop system.**

GETTING HOLD OF THE SOFTWARE

AmiNet is the place to look for Internet and comms related software that doesn't have it's own specific homepage. Use one of the following sites:

ftp.wustl.edu
/systems/amiga/aminet/comm/tcp
ftp.uni-paderborn.de
/pub/aminet/comm/tcp
ftp.doc.ic.ac.uk
/pub/aminet/comm/tcp

Demon's "Mail" can be obtained from their own FTP site:

ftp://ftp.demon.co.uk/pub/amiga
THOR http://www.cs.uit.no/~kjelli/thor.html
YAM http://bitcom.ch/~mbeck

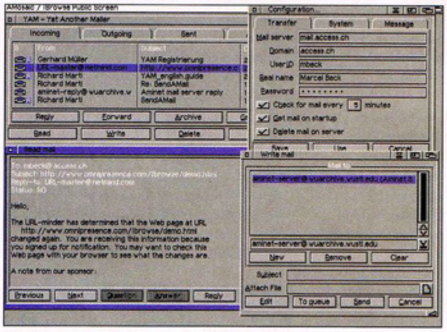
The only external programs still required are those that handle sending and receiving mail from your ISP (i.e. *AmiPOP*, *sendmail*, *recmail* etc), but as mentioned most archives of *AmiTCP* will have these set up already.

MetaTool supports multiple mail folders and fully supports MIME both for incoming and outgoing messages. When you receive a MIME message, *MetaTool* correctly handles the display of each MIME partial, according to the definitions set up in a "mailcap" file. I tried it with just about every file type I could think of (and that I had bothered to set up for the previous *MetaTool* incarnation). Everything worked fine, from graphics files (IFFs, GIFs, JPEGs – you name it) through samples to a number of obscure and experimental types that I had set up including a type for *Final Writer*.

It's when you reply to a message or send a new one that MetaTool's uniqueness comes to the fore. Instead of dumping you straight into a text editor and letting you manually type your message, *MetaTool* assembles multi-part messages by dragging and dropping the appropriate files. If for example you want to include an IFF picture in your message, simply drag it into the *MetaTool* composition window. If you actually want to manually edit a text file then, when you've added all the parts of your message and shuffled them into an appropriate order, just click on the send button.

The only obvious disadvantage to *MetaTool* is that it requires the installation of the (for some) dreaded Magic User Interface (MUI). MUI is a set of GUI extensions, that make it easier for programmers to add complex features to Intuition-compliant programs. Some people have moaned that it's buggy, but I've never had any problems using it with *MetaTool*.

Yet Another Mailer **is another of those that support the multi-window look.**



YAM

YAM stands for *Yet Another Mailer*, and of course, that's what it is. It's a modular system with MIME support for outgoing messages, and some excellent add-ons such as a fully featured address book, and context sensitive help bubbles. As well as MIME, *YAM* also has automatic support for UUencode/UUdecode.

It's either an advantage or a disadvantage depending on your viewpoint, but YAM makes extensive use of MUI which means that such things as fonts and window size are all completely under user control.

YAM also has a built-in POP3 client making it extremely simple to install and get working alongside an existing Internet TCP/IP system. Support for incoming MIME messages is currently under construction, but should be available soon. Whether you prefer *YAM* to the already fully operational (MIME wise) *MetaMail* is a matter for the individual.

When deciding on a mailer, it really comes down to personal choice and the programs mentioned here are by no means the only ones. If you prefer the no frills approach, then Demon's own "Mail" system is perfectly competent. At the other end of the complexity scale comes *Thor*.

I would advise that, if you can stomach the thought of MUI (and remember, if you're using *AMosaic* then you already have it) then *MetaTool* is the one to go for. But perhaps the best plan is to have a look at all the systems and then make your own mind up about which one you would prefer to use.

JARGON

SMTP
Simple Mail Transfer Protocol. Until recently the main method of transferring Internet email to and from your computer.

POP3
Post Office Protocol (3). This is the pretender to the thrown in terms of email delivery. Some ISPs only support POP3 email delivery. In this case you'll need a copy of *AmiPOP*.

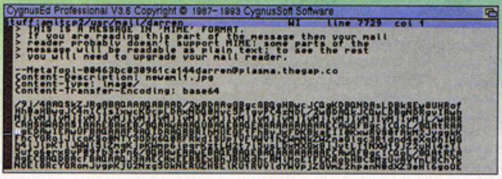
UUENCODE/UUDECODE
A method of encoding an 8-bit file into a form in which it can be transferred across the 7-bit email system of the Internet

UNDERSTANDING MIME

MIME stands for Multipurpose Internet Mail Extensions, and is a system for adding graphics and sound files (among many other things) to standard Internet mail messages. The method used for encoding the files is called Base64, and works in a similar (but typically uncompatible) way to UUENCODE.

Basically a MIME message is a text file which contains a series of references to other data objects, known as "parts" or sometimes "partials". Each part contains a description header which contains it's name and a code representing the type of data which is stored in that part. The actual data itself (referred to as the "Body" part) can either be encoded directly into the MIME message itself, following it's header, or "attached" to the original message as an "external part"

When the email message gets to its recipient (and providing of course that the recipient's mail system is MIME compliant) then the message is split back up into it's original parts, and displayed appropriately. MIME is one of those ideas that although brilliant always surprises people when it actually works.



OctaMED Tutorial

Part 2

After introducing some of the general concepts involved in getting started with *OctaMED*, Darren Irvine takes a closer look at the techniques involved in song construction.

Last month we saw how the Amiga's keyboard was mapped into a representation of a typical piano keyboard, and we learnt how to load in samples and get them to play back at different pitches. We took a quick look around the main *OctaMED* screen, and got to grips with some of the concepts involved in *OctaMED* song writing. We also took a look at how to record an individual track composed of a series of samples, and how several tracks made up a block. Now we'll take a closer look at some of *OctaMED's* on-screen and menu based options and look at how to go about combining several blocks to form a song.

BLOCKS, SEQUENCES AND SONGS

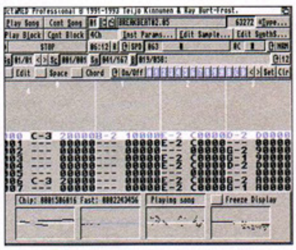
By now, you will probably have got to grips with stringing samples together to form tracks and the way in which a block is composed of a number of tracks. For now, it's probably best to stick to *OctaMED*'s four track mode – we'll take a look at getting more from *OctaMED* using the expanded track modes later on.

When you first run *OctaMED*, there is only one block available for editing, but you can easily add new blocks using the block select window (click on the button marked B or select "Block Select" from the pull down menu). As well as taking copies of existing blocks, you can add new blank blocks, and this block select window is also used to switch between which block you are editing when you have created several.

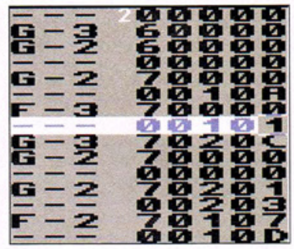
Keep adding blocks and modifying them until you think that you have created enough to string together to form a song. Remember that if you intend to repeat the same block several times in a song, you still only have to edit it once - this is where the sequence selection window comes in.

By and large, an *OctaMED* song is represented by the Sequence. The Sequence is basically a list of which blocks appear in the song and in which order. So, when you have finished creating the blocks that you want to use in your song, the next step is to call up the sequence selection window (click on the button marked S or select "Sequence Select" from the pull down menu). Initially the list of blocks in the sequence selection window will either be blank or only have block 001 in it. Appending blocks to the end of the list or inserting blocks is extremely simple – just click on the appropriate button.

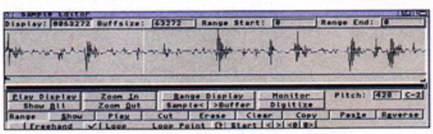
Deleting blocks that form part of a



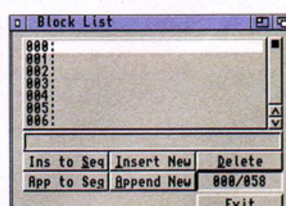
RIGHT: When playing a song in *OctaMED*, any channels that have samples currently playing will display the real time waveforms of the samples in the window immediately below the main track window. You can freeze this display if you prefer.



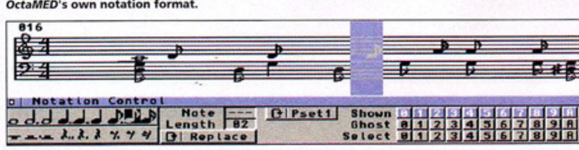
ABOVE: Looking at the track display in close up, the name of the note – G-3 or whatever is fairly obvious. This is followed by a group of five hex numbers. The first two represent the sample itself, the next two a control variable (10, 20 etc) and the last one a parameter for that controller.



BELOW: You can use the sample editor to trim off parts of samples. In this case – a breakbeat sample – you can quite clearly see where each part of the break occurs within the sample, and it is fairly simple to create new cut-up breakbeats by editing this sort of sample.



RIGHT: The block list editor is one that you will probably grow to be extremely familiar with – it lets you add new blocks to your song (there is initially only one) and jump around between blocks once you have created a few.



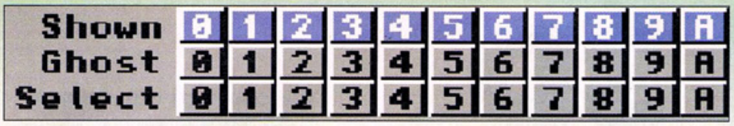
BELOW: *OctaMED* V5 can also display the song in standard musical notation, although unless you are already familiar with it, getting started can actually be much simpler using *OctaMED*'s own notation format.

A CLOSER LOOK AT THE TRACK NOTATOR

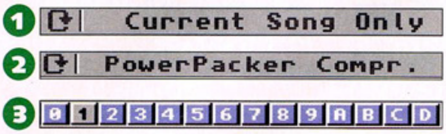
You will surely have noticed by now when you are editing a track that, when you press a key to add a note, alongside the actual description of the note that you have entered (C-1 etc) there is a group of five numbers.

These numbers are in hex and can be separated into three groups. The first two hex numbers in the group represent the sample which you have used to play the note. If you wish to change the sample that is used for a given block, rather than replaying the whole track, you can simply move down in step time and change this number to the one that represents the sample that you would prefer.

The next two numbers represent a controller that can be used to affect such variables such as the starting point from which a sample is played to the amount of slide (or portamento) that is applied to a note. We'll be taking a much closer look at the controls available and how to make the most of them later on. The last hex number in the group of five is the parameter for these controllers.



ABOVE: This musical notation format can seem cluttered when you've a lot of tracks playing at once, and you can use this grid to either ghost or turn off completely the display of notes from a particular track.



sequence is just as easy. There is no restriction to how many times a single block can be used as part of a sequence, either in groups of blocks or in a completely different part of the sequence.

When you have finished editing the sequence of blocks you have effectively created a song, and all that is left for you to do is to give it a name and save it do disk.

1 **Instead of saving the song complete with it's associated samples, you can choose to save the song, sequence, block and track data only.**

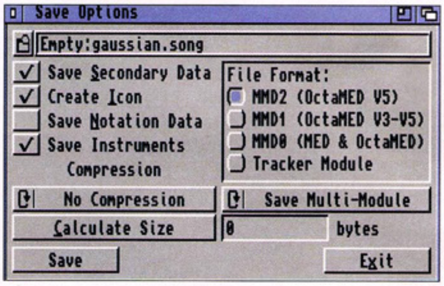
2 **When saving you also have the option of using the Powerpacker compression system to make the songs smaller on disk – you'll have to pay a time penalty however.**

3 **On the main screen there is a bank of buttons that can be used to mute a particular track or tracks when a block or song is playing.**

SAVING YOUR MASTERPIECE

Once you have finished editing the sequence and are happy with the way your song sounds, you will of course want to save it. This is easy to do, and the save option can be selected from the pull-down menu. In almost every occasion, you will want to save any songs that you have created using *OctaMED*'s own format, but you have the choice of older *OctaMED* and generic tracker module formats as well. These can be of use if you want to share a song with someone who only has an older copy of *OctaMED*, or if you want to output the song in tracker format for inclusion in a demo or game.

If you are saving the song for your own use, and don't intend to give copies of it away, you may wish to save the song without it's associated samples (which can be picked up separately from your sample list) to save space. Another way of saving disk space is to save the song in compressed format (using the Powerpacker system).



In normal circumstances you will save any songs that you have created using *OctaMED V5* in it's own format, but you have the choice of older *OctaMED* and generic tracker module formats as well.

Note that although you will indeed end up using less disk space if you save songs in this way, you'll also find that it takes noticeably longer to save and load them.

OCTAMED SONG CREATION OVERVIEW

The following is a very simple outline of the steps required in creating a song using *OctaMED*. Of course, in practice you will find yourself jumping between stages here (for example, almost completing a song and then loading in more samples to finish it off), and it is also a good idea to save your work at frequent intervals before you have even got to the sequence editing stage (*OctaMED* supports an auto-save feature which we'll look at later on).

Step 1. Load Samples.

Step 2. Edit Track/Tracks to create a Block.

Step 3. Add new blocks and edit them until you have enough.

Step 4. Open the Sequence selection window and assemble your blocks into a song.

Step 5. Give the song a name and save it to disk.

Now that you know enough to begin to use *OctaMED* as a song writing tool, it's a matter of practising and getting a feel for the way the program works. If you are already an experienced musician, you only have to adapt your way of working to suit *OctaMED* itself, but even if you are a complete novice with a bit of perseverance you should be able to use *OctaMED* as a learning tool as you grow in your musical ability.

Many well-known and respected module creators on the demo scene had no prior formal musical knowledge before starting to create *OctaMED* modules, so don't worry if all your creations so far sound worse than 2-Unlimited.

Next month in our musical tutorial we'll be taking a look at some more advanced techniques for handling samples within *OctaMED*, including how samples can be manipulated in real time using the note control information that can be added alongside the note in a track.

THE OCTAMED NOTATION WINDOW

If you are an experienced musician with the ability to read standard musical notation you will appreciate *OctaMED*'s notation display mode. Instead of representing a block using *OctaMED*'s proprietary notation system, this mode makes use of the familiar note and stave notation.

It can be a bit tricky to get used to, even if you have been reading music notation for years, since initially all the note information from all of the tracks that make up the block in question are displayed. However, a bank of control buttons can be used to determine which of the tracks belonging to the block are actually displayed. You can choose between either displaying or not displaying a given track, or having it's notes appear "ghosted" relative to other displayed tracks.

Whether or not this display mode is going to be of any use at all to a complete musical novice is questionable, but it can be nice for more experienced musicians to see a proper representation of their creations.

JARGON

Sample

The Amiga's internal sound system operates by playing back long strings of numbers which are a digitised representation of a sound – these strings are known as "samples".

Track

This is the basic unit of a song composed on *OctaMED* (hence the descriptor – "tracker"). A track is basically a set number of notes (typically) 64 played automatically one after another at a given speed (the "tempo" of the track). As well as holding information about which note and which sample will play at a given position in a track, other control information can also be added.

Block

A block is a group of up to 64 tracks, playing simultaneously. With *OctaMED* you can have up to eight tracks of internal samples, and the rest can be used to trigger external instruments via MIDI. You can define up to 999 blocks per song.

Song

A song is basically a number of blocks strung together – also known as a sequence. A song need not be composed entirely of separate blocks – indeed, it's common to play the same block a number of times before changing, and you can return to re-use a block as often as you like within a song.

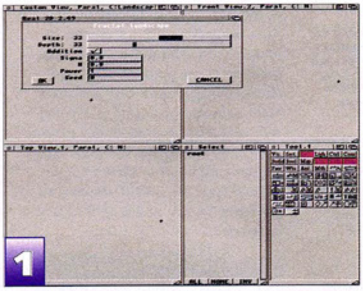
Module

Although you can save song data on it's own, and load the samples used in it separately, it is common to save both song and samples in one file – known as a "Module".

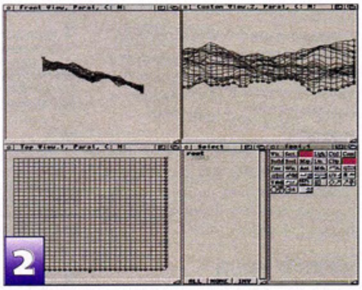
Real 3D Version 2

Welcome to our second *Real 3D 2* tutorial. As with the first installment we'll be concentrating on the new features of version 2.

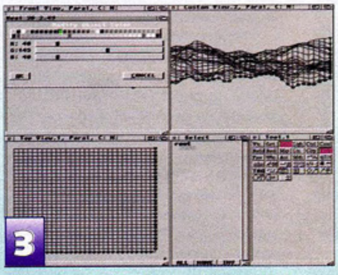
This month we'll be creating a nice little landscape, complete with water, ground and a tree. We'll be using the fractal-based landscape and tree generators as well as employing some basic mapping techniques



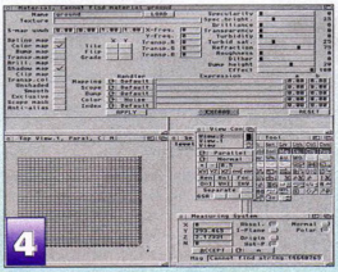
We'll start with an easy one first, the landscape. You can cal up the landscape-generator under the menus Create/Fractal/Landscapes. You can either use the default settings or alter them as you see fit, but don't make the size and depth values too high.



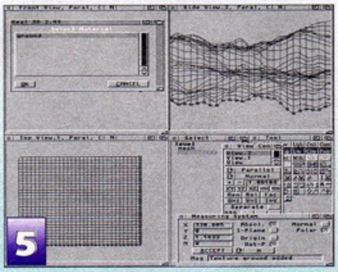
Click on OK and then go to the top view (if you are not in a standard tri-view environment, press right-amiga<3>). Next set the area your landscape will cover, by clicking at two points to describe a rectangle.



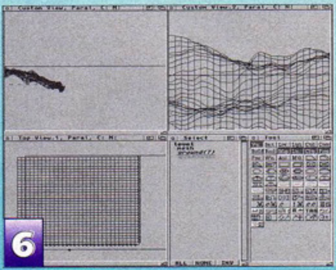
Change the object's colour by clicking on the Prop tool icon and shift-clicking on the first one of the new icons that pops up. Pick a colour from the ones available or create a new one using the RGB sliders.



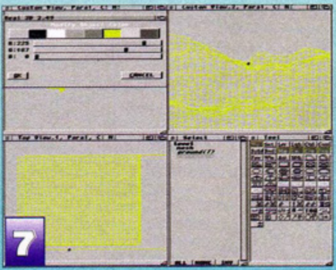
Call up the materials window by pressing <right-amiga> <m>. Enter a name that you will remember for the material and press <return>. Click on the mapping type Shadow map as well as Color. Click on the Color handler gadget until it is Noise active.



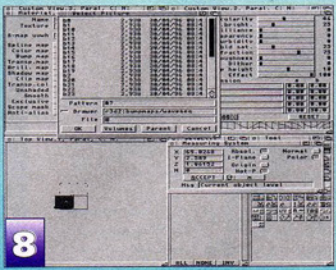
After clicking on Apply, select Create/Mapping/Parallel to select your new material. This will create a mapping for the object once you've drawn a rectangle. Perform an Environment render and see if you like it, if not try adding a texture file.



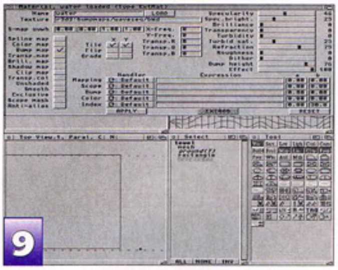
Now for the water. We'll start by creating a plane – using the Create/Visible/Rectangle menu or the Vis icon's rectangle icon. As with the landscape use the Top View to draw a rectangle, then position it at your desired water-level.



Position the ViewCam for a nice angle using the cursor keys rotate your view and pressing <right-amiga><l> to zoom in. Change the object's colour to whatever you like, press <right-amiga><m> again and create a material called Water.

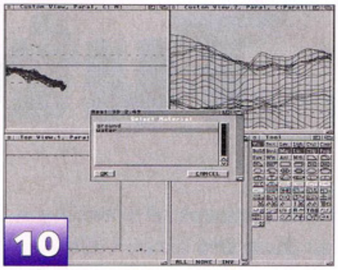


Press <right-amiga><d> to select a texture and go to the following directory R3d2:bumpmaps/waveseq/. Select a file and click on OK, then replace the file's name with b%d – this will tell *Real 3D* that you want to load a sequence.



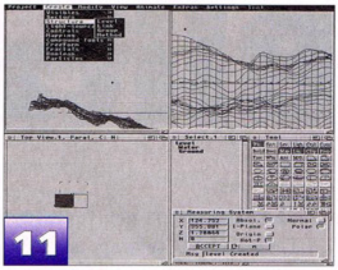
9

Click Bump map on and Colour map off and select Tile x and y on as well. This will turn our texture into a bump map and make sure that it's tiled or repeated over the surface. Change the rest of the settings to match the grab – or experiment.



10

Create another parallel mapping with the water material and then render. Not what you expected? Sorry to do that to you but it's to give you an understanding of how *Real 3D*'s hierarchies work and is easily remedied.



11

The problem is that both mappings are applied to both objects. To cure this, create two new levels using the Create/Structure/Level menu and rename them as Ground and Water by using Modify/Properties/Name. Then cut-and-paste the objects and mappings into the levels using menus under Modify/Structure.



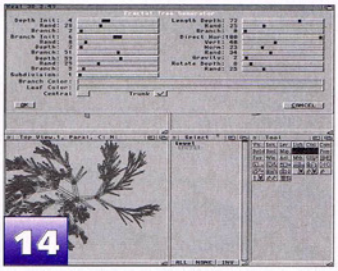
12

That's a bit better isn't it? If you're not happy with the waves on the water you can adjust them by resizing the mapping with the stretch tool and changing the material's attributes such as bump height or specularity.



13

Next we're going to add a tree, I won't lie and say this is simple – you'll need to experiment a great deal to get the results that you want. The Tree tool can be found under the menu Create/Fractals/Tree.



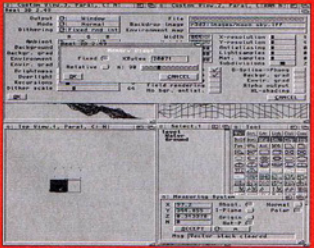
14

We can't go into too much detail, but here's a few tips: draw the sphere small (this defines the branch width), the line defines branch length, Direct governs the branching directions, Gravity makes branches sag and the currently selected object will be used as leaves.

MEMORY CONSERVATION

Real 3D is an incredibly powerful program, but does have some exhaustive system requirements. You're quite likely to run out of memory at some point – I had 2Mb free from 24Mb of Fast RAM (I had 3 trees though)!

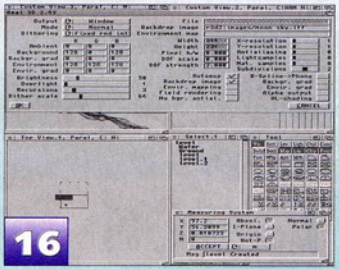
You can improve things by adding some virtual memory with a program like *VMM* or some real RAM. *Real 3D* tends to use as much memory as it can, but you can set the memory usage manually from a menu in the render options window.





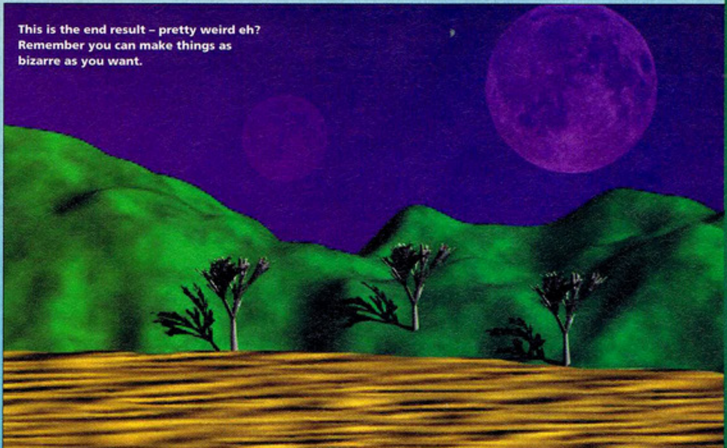
15

Next, a background. Using your favourite paint or image processing package create an image to be used as the sky. I've gone for a rather clichéd more-than-one-moon job. Create it at the same size you intend to render at.



16

Press <right-amiga><h> to bring up the rendering screen and set the rendering type to Environment. Next use the Images to define a backdrop (select your picture) and check the Backdrop image button. Be warned you may run out of memory.



This is the end result – pretty weird eh? Remember you can make things as bizarre as you want.

Blitz Tutorial

Last month we mastered the concept of creating a Window which was larger than the screen display Now we can integrate it into the existing HTML code.

```
.process

WTitle "Processing HTML","Processing HTML"

WCls
Redraw 0,1
preview=On     ; Nothing is printed, at first
For scan=1 To 2

  bold=Off
  underline=Off
  italic=Off
  size=3
  oldsize=3
  original=3
  Gosub use_font
  chunk$=""
  startx=8
  starty=8

  xpos=startx
  ypos=starty
  sizey=13

  limitx=1400   ; How far across the screen text can go...

  WLocate xpos,ypos

  letter=1
  tag=False
  value=False
  t$=""
  v$=""
  lnk$=""

  While letter<count
    l$=Mid$(html$,letter,1)
      If Asc(l$)=10 l$=" "
      If tag=True
        If l$=">" Gosub process_tag:l$="":tag=False
        t$=t$+l$
      Else
        If l$="<" tag=True:t$="":l$=""
        If (l$<>"" AND value=True) v$=v$+l$
        If (l$<>"" AND value=False) Then Gosub process_text
     EndIf
    letter=letter+1
  Wend

  If preview=On

    ; Close existing screen and re-open one the right size
    CloseWindow 0
    height=ypos
    If height<256 Then height=256
    Gosub open_display
  End If

  preview=Off

  Next scan
Return
```

Listing One: To make it possible for the user to scroll up and down, the program needs to calculate the height of the document.

BLITZ ON THE INTERNET

If you have Internet access, then there is plenty of material out there for you to download, make use of and learn from.

A particularly good example is the Binary Assault site, which contains general *Blitz* info as well as source code.
Go visit
http://www.cet.com/~xbones/
and have a look at some pretty decent *Blitz* programming.

There are several different strategies to deal with the unpredictable size of HTML documents – as we have already discussed in previous tutorials. Here is the method which I've used in this program:

1. Open a screen.

2. Open a standard 256-line window to start with.

3. Load in the HTML document, and process it. However, do not print anything at this stage.

4. Calculate how many lines the display would be if it were printed.

5. Close the initial window, and open a new one of suitable height.

6. Display the HTML document in the new window

7. Make it possible for the user to scroll up and down the document as required.

So far our program has worked in a "single parse" manner in that it has processed and displayed the HTML document in one go. With this new approach, we need to make the program pre-process the document to calculate the height.

Listing One shows what this segment of code looks like.

LOOPING

You'll notice that there is a loop (FOR scan=1 TO 2) which causes the program to repeat the processing of the HTML code. You'll also see that the variable "preview" is the key: to start with it is set to ON and this is checked for by any routine which prints to the screen.

Have a look at **Listing Two** which illustrates the routine that normally prints a horizontal line to the screen. Take special note of all the extra code that is required.

```
;
; HTML COMMANDS
;

.horizontal_line

If preview=Off
  y=WCursY
  w=InnerWidth
  WLine 8,y,(w-32),y,1
  WLine 8,y+1,(w-32),y+1,2
EndIf

Gosub new_paragraph
Return
```

Listing Two: This listing normally prints a horizontal line to the screen.

RIGHT: Listing Three shows the range and the values that are supposed to be returned.

```
.open_display

;
; Define and open a Screen and Window
;

; Define a BitMap
BitMap 0,640,height,2


; Define menus

MenuTitle 0,0,"Project"
MenuItem 0,0,0,0,"Load      ","L"
MenuItem 0,0,0,1,"Save","S"
MenuItem 0,0,0,2,"About"
MenuItem 0,0,0,3,"Quit","Q"
; Define Gadgets
PropGadget 0,-16,0,128+2+1024,1,16,244
; Open a Special Window
Window 0,0,0,640,256,$8+$0+$20000+$20+$8+$400+$80+$1000,"SuperWindow",1,2,0,0
SetMenu 0
SetVProp 0,1,0,(10/height)
Redraw 0,1

Gosub prepare_fonts
WindowFont 0
Return
```

```
; FONT Routines
.use_font
; Control the font used, depending on size and attributes
    style=0
    If underlined=On style=style+1
    If bold=On style=style+2
    If italic=On style=style+4
    WindowFont size,style

; Alter how much space a newline takes up, depending
; on the size of the font used.

    Select size
    Case 0
      sizey=13
    Case 1
      sizey=28
    Case 2
      sizey=24
    Case 3
      sizey=18
    Case 4
      sizey=15
    Case 5
      sizey=13
    Case 6
      sizey=11

    End Select
Return
```

Listing Four: The new code keeps the variable "sizey" up-to-date.

necessary to know what sort of range it will be moving through and what sort of values it's supposed to return. This is illustrated most clearly in **Listing Three**.

This is the code which opens the Window. It was taken from the start of the listing and converted into a subroutine, because it now needs to be called whenever a new HTML document is loaded: before it was only called once at the start of the program.

Other changes to the program include a fixing of a bug which meant that larger text wasn't spaced out properly. For some reason I had neglected to keep the variable "sizey" up to date: it's this variable which decides how far down the screen the cursor should move at the end of every line. **Listing Four** shows the new and improved code segment, with the altered section highlighted.

CONSTANTS

There are several variables in the HTML browser listing which don't change their values once they have been set. Since these variables don't actually "vary", we can replace them with a special variable called a constant.

Constants are really substituted with the value of the variable at compile time, rather like a miniature macro. As a result, they take up less memory, work faster and are safer as they cannot be accidentally changed by your program.

To define a constant, use a hash "#" symbol before the variable name.

SCROLLING

The first time through the loop, Preview is still set to ON, and this triggers the closure of the existing window, and the creation of a new window of the right size.

Because we don't know the size of the display until the program is actually running and an HTML document loaded, we need to alter various other aspects of the program: specifically the code required to look after the vertical proportional gadget which is used to scoll up and down the screen.

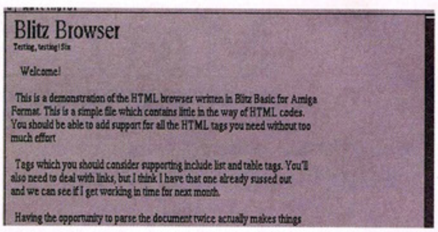
When setting up the gadget, it's

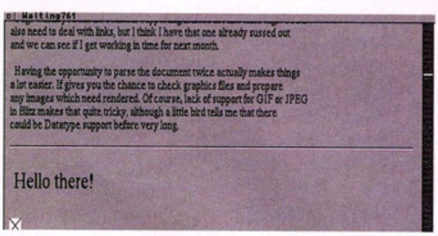
ADAPTING

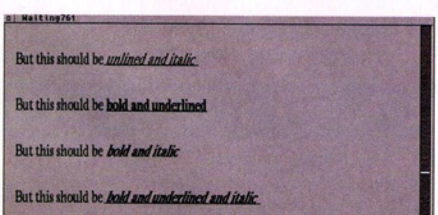
Adding the scrolling code to the HTML display engine wasn't particularly difficult, but it's made a huge difference to the way the program works. You should be able to adapt the program to add more gadgets without much trouble (have a look at other programs to see how they deal with scrolling and loading and saving).

Remember you can get the full source code on the *Amiga Format* CD-ROM or from my Web page which has the URL:

http://www.webzone1.co.uk/www/johnk.







At last we can scroll through documents larger than 256 lines.

MACROS

We've already seen how Statements can be used to package up subroutines which may be called more than once, but there is another way: MACROS.

You may have used Macros on a word processor – you program a key to insert a pre-defined word or sentence. Blitz Macros work in a similar way. You define a Macro like this:

Macro name ; Contects of macro end Macro

Here's an example,

Macro bigprint NPrint "This is printed" NPrint "by a macro." end Macro

HOW DO YOU USE A MACRO?

Now to use the macro, you would use code like this:

; Start of program !bigprint !bigprint mousewait

The difference between a macro and a statement is that the macro code is not merely called: it's actually substituted. So when the compiler is looking at the code in the example program, it actually sees this:

; Start of program NPrint "This is printed" NPrint "by a macro." NPrint "This is printed" NPrint "by a macro." mousewait

WHY WOULD YOU USE A MACRO?

Sometimes it can make more sense, and it can also save you a lot of typing. It's also a lot faster than calling subroutines, because the code is always there – there is no jumping around and returning.

You can use parameters with Macros too. Use the back apostrophe (press ALT and the key above TAB) with either a number (1, 2, 3, 4 etc) or a letter (a, b, c, d etc) when you need to refer to the parameter. The 0 parameter is special and refers to the number of parameters present.

Here is an example of parameter passing:

Macro bigprint (`1+`2+`3+`4) End Macro

NPrint "start" NPrint !bigprint{10,20,30,40} MouseWait

This is expanded to:

NPrint "start" NPrint (10+20+30+40) MouseWait

Macros are not as flexible as statements, and you should simply substitute one for the other. Be particularly careful when passing complicated mathematical values into the macro and if in doubt, put brackets around everything.

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Amstrad PCW9512 M/Strike	2·60	2·45	2·25	2·05
Brother M1009/1024/1109/1209	3·90	3·75	3·55	3·35
Citizen 120D/LSP10/Swift 24/9	2·85	2·70	2·50	2·30
Commodore MPS1220/1230	4·50	4·35	4·15	3·95
Epson LQ100	4·10	3·95	3·75	3·55
Epson LQ200/400/500/800/850	3·45	3·30	3·10	2·90
Epson FX/MX/RX80/FX/LX800	2·90	2·75	2·55	2·35
Epson LX80/86/90	2·12	1·97	1·77	1·67
Mannesmann Tally 80/81	3·90	3·75	3·55	3·35
NEC Pinwriter P2200/P2+	3·03	2·88	2·68	2·48
Oki ML182/183/192/193/195	3·17	3·02	2·82	2·62
Panasonic KXP1123/1124/1140	3·46	3·31	3·11	2·91

BLACK	1 off	2+	5+	10+
Panasonic KXP1080/1180/90	2·89	2·74	2·54	2·34
Panasonic KXP2123/2124/2180	4·95	4·80	4·60	4·40
Seikosha SL90/92/95/96	5·70	5·55	5·35	5·15
Star LC10/20/100	2·29	2·14	1·94	1·84
Star LC200	3·00	2·85	2·65	2·45
Star LC24 – 10/20/200	2·86	2·71	2·51	2·31
Star LC240C, LC24-30	7·75	7·60	7·40	7·20
Taxan Kaga KP810/815/910/915	3·14	2·99	2·79	2·59
COLOUR	**1 off**	**2+**	**5+**	**10+**
Citizen 224, 240, Swift 24/9	11·95	11·80	11·60	11·20
Panasonic KXP2123/2124/2180	10·63	10·48	10·28	9·88
Star LC10/20/100	6·00	5·85	5·65	5·25
Star LC200	9·78	9·63	9·43	9·03
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Canon BJC 4000 Black Refill	8·50	8·30	8·00
Canon BJC 4000 Colour Refill	14·50	14·25	13·90
Commodore MPS1270	12·13	11·93	11·63
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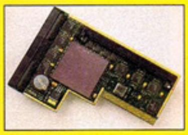
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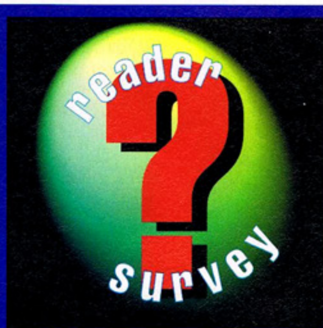
TIME FOR A SURVEY?

There appears to be a lot of talk in the Amiga media about software being held back due to a lack of users with hard drives, RAM, accelerators or up-to-date operating systems. This is understandable, especially with software sales of late. But isn't it as much of a risk not to try and sell software that doesn't make use of today's hardware?

If you were to take a look at the letters in Workbench over say the past six months, you should notice that most Amiga users now have as least a hard drive, extra RAM, Workbench 2+ and a lesser extent, although still a good majority, own an accelerator or a factory standard 68020 or better.

The A1200 should be looked at as the entry level Amiga in terms of RAM and CPU, but now there are plenty of older 68000 based machines upgraded well beyond the power of an out of the box 2Mb RAM 170Mb hard drive A1200. You can even get an A600 running at higher specifications than a bog standard A1200 and as for all the other 68000 owners, upgrading your CPU has never been so cheap and that's an obvious sign to the software houses that Amiga owners are updating their systems. Products don't normally get any cheaper unless they're selling.

Anyone using their machine for more than just games couldn't really work with less than a



reasonable sized hard drive, 4Mb RAM, Workbench 2+ and a 68020 CPU. I'm quite sure that even the most serious users like to take a break and play the odd game every now and then and they should be able to use games software that uses their machine to its full potential in the same way as any decent piece of serious software should. I believe software written to make use of at least extra RAM and faster CPU's would put a little bit of the WOW! back into Amiga games.

The point of this letter is, if yourselves and all the other Amiga magazines were to put together an independent survey of people's systems, like you've done in the past, this survey could then be passed on to various software houses providing valid information on what people have and want for their beloved machines.

This could provide the step forward many people have been waiting for. I don't think this should be too much trouble for yourselves or any other magazine, after all your always telling us how much you care about the Amiga. Look upon it as a way of proving how grateful you are and showing that it's the least thanks you can give to thousands of loyal readers every month.

I am confident that ten minutes with a pen is not too much to ask of anyone who wants to keep the Amiga live.

Paul M Green
London

And commission a survey is exactly what we have done. Not only will this help us, and the Amiga developers and dealers who advertise with us, but also all of our readers too.

The more we know about you and your machine, the more we can adapt Amiga Format to your needs, and the better we are at campaigning on your behalf.

Please turn to page 23 and take the time to fill in and return the survey.

GOING INTO OVERDRIVE

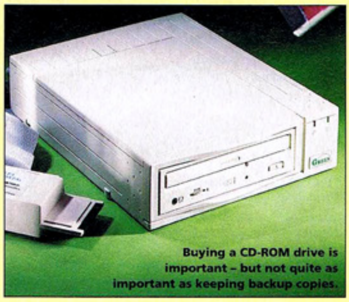
I have had an Amiga now for six years, and have always been more than happy with first my A500, and now my 1200, which I use mostly for music. Last year I decided to buy myself a CD-ROM drive (an important purchase these days). So I was very happy that you have decided to put a CD as a cover gift on the front of your magazine. I bought the first one in the June issue, everything worked fine until I came to the *Wordworth* demo, which crashed! So I decided to reload my OS, thinking that I had taken some important libraries off it. But unfortunately when it came to reinstalling my CD software I found that my disk is ruined! Checksum errors all over and horrors of horrors I had committed the worst crime of my life, (maybe) and not made a backup copy. *DiskSalve* could not save it nor *Fix Disk*. If I had made a copy I cannot find it amongst the hundreds and hundreds of floppies that I have collected over the years. So I decided to find the advert in your mag of the company that I had brought it from (Indi Direct) but they are sadly no longer in existence nor are the actual manufacturers, Zappo.

So I am writing to ask if there is anybody out there who might have a copy of this particular piece of software which is *Overdrive CD. OverCD* install disk by ARCHOS.

As I live on Dartmoor I find it very hard to make other Amiga contacts so this seems to be as a good way of finding a copy. I would be very grateful if I could use my CD-ROM drive again.

Mr A J Holcroft
Devon

Is there anyone out there who can perhaps help Mr Holcroft?



Buying a CD-ROM drive is important – but not quite as important as keeping backup copies.

SLAMMED

I don't like criticising your excellent magazine but I that feel I must. Your recent review of the game *Slam Tilt* had me with my hand in my pocket waiting with baited breath for its release. Whilst waiting I read a review of this game in *CU Amiga* who also gave it a rave review but mentioned to my dismay that it was not hard drive installable.

Now here is where my criticism begins why did YOU not inform me this was the case as I refuse to waste my money on ANY game that is not HD installable. In this day and age it is totally inexcusable. Why not use copy protection manuals like most of the software companies. What makes it more unbelievable is that this is a company who's last three pinball games were all HD installable.

Now back to you, why can't you have a policy to knock 20% off a games score for not being HD installable? If you said "this game scores only 73% but

Continued overleaf ➡



It's Slam Tilt, the excellent pinball game, and it can be installed onto your hard drive.

if it had been HD installable it would easily have been worth 93%" this might scare the company into making it so.

P.S. Three months ago I saved up £300 pounds to buy a Sony Playstation and on my way to buy it I ended up at Gordon Harwoods and spent all my money on a Blizzard 1230IV with 4Mb which I still haven't regretted, so to all you would be Playstation/Saturn owners don't do it buy an 030 accelerator instead.

P.P.S. If I added a 50MHz FPU to my accelerator would it speed up games like *Breathless* even more than they are already, or would it be barely noticeable.

Mr G Rodgers
Sheffield

We do mention when games are not HD installable, if that would impede playing the game. We did not say Slam Tilt *couldn't be installed to a hard drive, er, because it can. I have it installed on my drive right now. The lesson you have learnt here is that everybody is fallible, except for us. You may send your apology to the usual address. And no, an FPU won't speed up* Breathless.

WALKING BACK TO HAPPINESS

When Viscorp, or Phase 5 or whoever, decides to design and produce a new Amiga computer I hope for their sake that they realise how difficult it will be for them to make a profit from it. Of all the companies like Sinclair, Dragon, Oric, Acorn, SAM, Amstrad, Commodore and Atari that have decided to launch themselves into the home computer market, the one thing that unites them is that their habit of making products that nobody wants to buy has left them either bankrupt, bought out, or just plain stuffed.

However, mistakes are there to be learnt from, and there is a definite pattern to the popularity of home computers that must be observed. This is that the biggest element that separates the C64s from the Atari Falcons is the "WOW" factor of a computer's capabilities when it is first launched. Power is what the whole computer industry is interested in, and if your new computer can't do a lot of things that already popular machines can manage, then there's precious little that will encourage software people to take an interest in your machine and give it the software support that will make it seem worth buying over established products. A rough guide to making a truly successful

PROTECTION RACKET

I have written in to make a little complaint. Do not worry, for it is not aimed at your wonderful mag, but at the computer games industry. Now, before you put my letter in the bin, this is not another letter complaining about prices, but one about a lot of games publishers' refusal to acknowledge the fact that a lot of people out there do, in fact, have hard drives. Of course, their reply for making games "NDOS:" is the old "Piracy...blah....moan" reason.

Have they not heard of *XCopy*? This is a PD utility, among others, that can 'backup' these types of disk. So, what we have is a way of increasing production costs, that also makes games hard disk uninstallable. Oh, and it means that any pirates out there have to fork out a whole 99p!

And that's not all. My beloved *Mortal Kombat II* disks have become corrupted. Luckily, I have *DiskSalve2*. But would you believe it, *MKII* is "NDOS:" so I can't repair it. Aaaarrrggghhh! Now, you've all played *Worms*, and you've all used the nice little protection booklet, and 99.9% of you wouldn't even think of copying all the codes out!

Come on games makers. If you're going to protect your work then please, please, please, no more "NDOS:" disks. There are much better solutions to piracy than this!

One last thing. Several games, for example *Worms* and *Lemmings 2*, use any available extra memory to load extra sound effects. Would it not be possible for multi-disk games to use available extra memory (I have 6Mb) to load the data from all of the disks into memory, thereby eliminating disk swaps completely (although initial loading time would, obviously, be increased).

Thanks for the *Final Writer* Coverdisk. It rates second to the *AmosPro* disk.



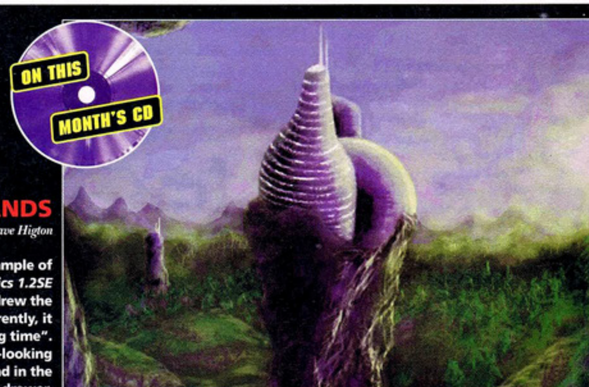
Richard has lost his favourite *Mortal Kombat* all because the game is "NDOS:".

Richard Martin
Leicestershire

A fair point. Although given the unscrupulousness of the pirate community, you can understand why they like to take such precautions.

Games could make use of extra memory to store more information from the disks, but the downside is, this would take ages. However, for some games (and here I'm thinking of* Primal Rage *for example) it would be a great benefit. Programmers should take note.

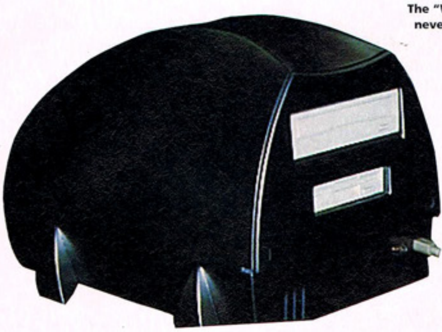
The Gallery



HIGHLANDS

By Dave Higton

Dave Higton sent us this example of his work. He used *Photogenics 1.2SE* on a 10Mb A1200/030 and drew the whole thing freehand. Apparently, it took him "a bloody long time". Dave has also created two great-looking *Worms* levels which may be found in the ScreenPlay/Utilities drawer.



The "Walker" that never really was.

home computer is to make a machine with the graphics power of the next "generation" of game consoles a few years before they arrive.

The Commodore 64 could at least match the abilities of the 8-bit Sega Master and Nintendo Entertainment Systems: It sold 15 million. The Amiga A500 fell slightly short of the power of the Mega Drive and SNES: it sold three and a bit million, The A1200 could match the abilities of the Mega Drive and SNES a few years AFTER they came out: it sold about 9000 units last Christmas, at a mere three years old.

So, a new Amiga is going to be brought out. Assuming that nobody is daft enough to only make a PowerMac style big-box computer, here is one scenario: A new one-piece A1200-style Amiga with CD-ROM is released in early 1998 at the price of a cheap PC. It has the processor power of a Pentium and extra chips giving similar 3D and FMV capabilities to a Playstation, at a time when Pentiums are the bare minimum PC specification and the Playstation is over three years old and costs less than £150. It has no owners, little software, and nothing that makes pampered games developers take an interest in what they can do with it.

Computer buyers prefer computers with decent programs available for them and therefore buy inferior PCs. Most diehard Amiga fans either can't afford it or prefer to wait to see if it falls in price and rises in popularity. It doesn't. Viscorp fail to recoup the cost of production and go bankrupt. R.I.P. Amiga.

Here are my suggestions for a successful alternative: A compact 32Mb computer based around a RISC processor running at about 400MHz. 3D textured polygon processors of a similar power, and broadcast quality video from a 1.7 gigabyte high density CD-ROM. Full colour high-resolution graphics. An internal 3.5" hard drive, and no floppy drive but an industry standard Zip-type high-capacity drive as an option for those who want a removable medium (this would also help keep the price down). PC standard joystick, mouse, modem and printer ports. The ability to display all games and utilities on TV or cheap, Hi-Res PC monitors. An A2000-type big box version for power users. If released in early 1998 at a similar price to an expensive PC, and with good productivity, emulator and Internet programs, this machine would easily be the best home computer available. Game developers, and particularly American ones, would get the same kind of high-tech fever that made them program games for the 3D console and early PC-CD. They would start making the kind of games that are as much of an advance from the low-quality FMV and crude 3D graphics of modern games as the MegaDrive was a step on from 8-bit systems. Rich computer buyers looking for a state of the art computer for games and general home use would choose the new Amiga over a PC for its value and unmatchable, unavailable elsewhere games.

This bulk of users would keep the Amiga as an attractive machine to software developers as it became less technically outstanding, and by the time its capabilities were the norm in approximately the year 2002 it would be an integrated, value for money package that could do almost everything you would want a PC for, for about half the price, and a market leader to boot.

The next Amiga computer released could decide if it will ever be possible again to have a modern home computer available for less than the price of a fully fitted kitchen. Five years may seem like a long time to wait for an Amiga that is both affordable and well supported, but history shows that it's that or nothing. All those people who emailed Viscorp asking for something nice and cheap should contact them again to say that they've changed their mind.

Grant Sutcliffe
Dorset

IN AGREEMENT

I would like to write to agree entirely with J. Tunnicliffe's opinion on the future shape of our

Continued overleaf ➡



RIGHT: The A4000 may cost a lot but it is very easy to expand.



GOLFGUIDENTEST *by Lars Martensson*
Lars is a superb artist and this is one of the four pics he sent in – the rest are on the CD.



ROOM *by Iain McNaughton*
Created in *Imagine 3* and touched up in *Deluxe Paint 4* this was created on an A1200 and took over eight hours to render.



ROBOCOP 2 *Metal Sonik*
We particularly liked the use of bright contrasting colours for this picture.

A CD FULL OF WORMS





WORMS: We haven't heard anything about the *Worms Enhancement CD* yet but you can be assured that we'll let you know as soon as we do.

First of all, congratulations on two counts:
a) For being a great mag in general,
b) For being the first Amiga mag to make cover CDs a permanent installment. I've bought the first two, and I haven't even got my CD-ROM Drive yet! Not only does the cover CD benefit the readers (well, those who've got a CD-ROM drive anyway), but it also shows that the Amiga is not as far behind the PC as it at first may seem. All we need now is a cheap, high-powered, next-generation Amiga, (along with a cheap accelerator card for current Amiga owners) and we will be able to laugh hysterically at PC owners once again. The DEC Alpha Chip, mentioned in your news pages, seems an attractive proposition.

On the subject of CDs, have you heard that Team 17 are releasing a *Worms Enhancements CD* for the AGA Amigas in July? (Hey, if you don't believe me, give Team 17 a call!) It might be a good idea to include custom levels and sample sets on the cover CDs.

Finally, maybe your cover CDs, Team 17's *Worms* Enhancements venture, along with the *Personal Suite* and *Photogenics 2* will finally give Amiga commercial CD-ROM the kick-start (no pun intended) it has so badly needed over the past few years.

Ian Griffiths
Wolverhampton

Well, that is part of the reason we wanted to produce a CD version in the first place. If you have any good ideas about the sort of stuff we should be including on the CD, please write in and let us know.

⬅ beloved machine (Issue 86). I mean, what was wrong with the desktop Amiga 4000s? They provided easy expandability and they looked like a computer, rather than the Walker's "Dustbuster" image. Plus, the 4000s cost about the same three years ago as the Walker's proposed price, only it looked a darn sight better and was more expandable from the word go!

If Viscorp want an intermediate machine before the arrival of the RISC machines, then I think resurrected 4000 desktops would be an all round better option than the Walker.

On the subject of the lack of new software for the Miggy, then how about this for an unoriginal idea. Through you *Amiga Format* guys, we get together a petition to send to the major software houses and request that they port some of their best titles to the Amiga. Get people to write, email or whatever, but get a large bunch of owners and professionals (such as David Pleasance if he'd agree) to put their names to a petition and send it to Psygnosis, LucasArts, Ocean, Gremlin, and so on. Point out the success of the top selling Amiga titles and give them a base machine specification to aim at A1200 with a 50MHz '030, 4Mb RAM, and a CD-ROM drive?) and show them that we Amiga owners can make them MONEY! Who knows, maybe we will see *Discworld*, *Hexen*, or the Bitmaps *Z* ported across to our favourite machine after all.......

PS Does anyone know if there is a way to get *Shadow Fighter AGA* to run from a hard drive on a 1200 with a 28MHz '020 Blizzard 1220/4 unit, because I am having no joy at all!

Neil Sanderson
Derbyshire

Some well reasoned arguments there. What do our other readers think? There is plenty of opportunity for all of you to express yourselves in our reader survey.

SOLD OUT

Firstly a complaint, I have tried in vain in the sleepy little town of Holbeach to buy the July issue of *Amiga Format CD*. There are three shops that sell magazines in my town Fourbuoys, Paperchain and a Somerfield store. All had the disk versions, but none had the CD.

I and a friend both have A1200's with hard drives and CD-ROMs and we will always buy a CD version of a magazine if there is one available. But if they are not on the shelves how do you expect them to sell?

Ok, so you could say we could subscribe, then we would be sure to get the CD versions, but if everybody with CD-ROMs did this what would happen to the potential new users of the Amiga. If CD-ROM versions of magazines are not on display how will they know they are available?

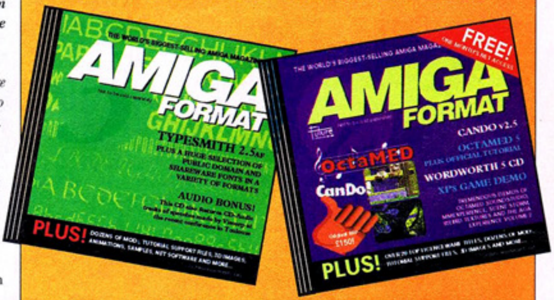
Now for some helpful information for users of Amiga's who also own Psion Series 3 computers. A brilliant little program is available on the Aminet called *AmigaNCP*, this will allow you to back-up files from your Psion to your Amiga hard drive. All you need to use it is *AmigaNCP Link* (the serial lead). You then get an icon on your Workbench that represents the Psion and you can read and write files to it just like any other device.

For instance, quite often at lunch breaks I tap out a letter on my Psion and then when I get home I transfer the file to my Amiga, load it into *Wordworth* edit, spell check it and then print it out. The spreadsheet files can also be transferred. *AmigaNCP* is a brilliant and very useful utility and I would recommend it to anyone with a Psion and an Amiga.

Nigel V. French
Lincolnshire

Unfortunately, we can't force newsagents to stock copies of the magazine because it is entirely up to them. Some newsagents may think that they won't be able to sell the CD version. They are obviously very wrong, because the CD version is in huge demand. The only way to get around this is to ASK THE NEWSAGENT. If enough people ask then they will start to stock the mag regularly. And then they can reserve a copy for you. Thanks for the PSion3 tips. I wonder how many Amiga owners have Psions?

ASK AND IT SHALL BE GIVEN...



Since you have brought out two versions of *Amiga Format*, I have found that the shops that sell the magazine normally, will only sell the ordinary disk version. They don't seem to know anything about the CD version. There doesn't seem to be much interest in Amiga magazines now, they are usually put into a corner, to make way for all the PC magazines. Why don't you just have one magazine, and make the CD available to readers who are interested, by coupon.

U.P. O'Donell
Dorset

The reason you don't see it in a lot of shops is, either they haven't ordered it, or they have sold out.

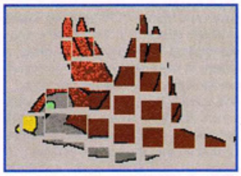
Small newsagents may have decided not to stock the CD version, but they will be able to get it for you if you ask them, and you will be able to find it at W H Smith's and John Menzies.

A coupon is a nice idea, but it wouldn't work. We wouldn't be able to estimate how many CDs to produce so easily, overseas readers would have to wait ages for their mag, send off the coupon and then wait ages for the CD too, and it would be much more expensive for us, and ultimately, for the reader.

We have tried to keep the cost of producing the CD down, and you may also have noticed that we charge a lot less for our CD version than some other Amiga magazines on the market.

AMIGA FORMAT COVERDISKS



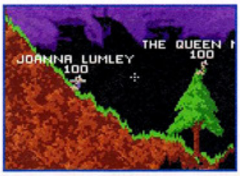


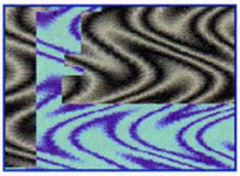










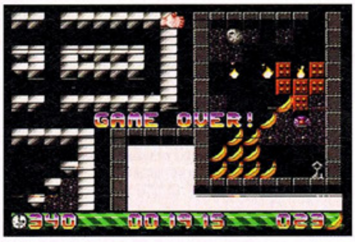


David Taylor introduces this powerful Coverdisk. Amazing animation and video effects at your fingertips.

David Taylor acts the monkey with this 90s style *Boulderdash* clone and gets wired with *Kumquat.*

Herman





ABOVE: *Boulderdash* goes nineties with this stylish clone.

INSET: Fire can hide items, so do check underneath flames.

RIGHT: Boulders falling too far and bouncing enemies may just finish you off.



B*oulderdash* is still considered one of the finest games ever by the *AF* team and we welcomed the chance to include five levels of this new 90's style revamp. The original gameplay has been retained, but all the graphics and sounds have been updated and there's a whole host of new features.

In *Herman* you must move your character around the levels, collecting all the bananas before you can exit the level. Each level has a timer, so you're playing against the clock. Helping and hindering you on the levels are a variety of objects and obstacles. The ones you should immediately notice are the boulders!

Herman can free boulders by walking through the earth that surrounds them. Notice that he can hold a boulder up if he stands underneath one, but that if he then moves down, the boulder will fall on him. So, if you're under a boulder, move to the side! You can use boulders and other objects by pushing them around the screen and dropping them on things.

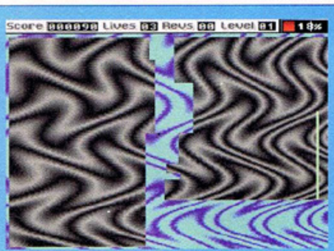
The controls for the game are simple – the usual joystick controls with fire performing actions. P pauses the game, Q kills *Herman*, Esc quits the current game and Help quits the game completely. In case you haven't seen the instructions – make sure your disk is write-enabled,

We've got a selection of great programs for you this month. *Herman* is an exciting *Boulderdash* clone, there's a re-creation of *Zolyx* and an exclusive version of the excellent video titling package *X-DVE*.

KUMQUAT

This is one of those games with that all praised playability. It's a re-creation of another classic game, *Zolyx* and I have been searching for a good Amiga version for years. You control a dot on the screen and the aim is to create boxes which will be filled in when you complete them, turning them into coloured plasma boxes. The idea is to take the screen from empty to as complete as required. Stopping you from doing this are a set of bouncing dots, which if they hit you will kill you. As you draw a box, you will leave a vulnerable trail behind you, which is solidified when you complete the box. Until then though you will get you killed if a dot hits it. You cannot go back on yourself or complete a box by crossing your own line.

You also have a certain number of reverse field generators. These are started by pressing fire and will reverse the direction that all the dots are bouncing in. This disk contains the first five levels, but you can register by sending £6 to the author D Schofield at:
6 Patten Close, Unsworth, Bury,
Gtr Manchester, BL9 8PY.
Prices vary for users outside of Britain. All the details can be found in the Readme file on the disk, which can be read by loading Workbench and double clicking on the icon.



Another clone and one that I am personally addicted to. Simple, but effective.

because your position is saved to disk. Now for a quick look at some of the new features of the game:

FIRE – Objects that fall into fire are not destroyed, but stored until the space underneath the fire is walked over, allowing the object to drop back out. Note that objects may be hidden inside fire.

WATER – When trapped water is released, it will flood the level and should be avoided unless you have a lifebelt.

LEGO BRICKS – Some walls are made up of Lego bricks. These can be destroyed using switches. Push a switch next to a wall and press fire. One switch can destroy all the purple lego walls on a level, but will only destroy the red bricks that are on the screen.

BOMBS – Some bombs look pretty much like boulders. They are exploded by dropping boulders onto them but note that you can position them first by pushing them around.

MONSTERS – There are three types of monster. Red monsters bounce randomly and when killed turn into food/drink. The purple and green monsters follow walls round and also turn into food when killed, but other monsters simply explode when you kill them.

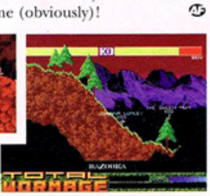
This disk contains the full Shareware game of 30 levels, but to access past the first five, you need to register and get the necessary password. You can register by sending £5 to the author, Paul Thompson at 10 Herrigton Court, Woodham, Newton Aycliffe, Co Durham, DL5 4RA. Cheques are acceptable.

Hint: If you get a little stuck on the first level then move the bomb to the right of the room and drop a boulder on it to blow up the wall. Lateral thinking is definitely the key to success in *Herman*.

WORMS – CUSTOM LEVELS

There's also a set of custom levels for the game *Worms*. These are archived on the Coverdisk and you need a blank, formatted disk to store them. When you've formatted a disk, boot the Coverdisk and de-archive the levels automatically. The levels can then be loaded into *Worms*, loading them from the menu, or copied to the TWCustom drawer on your hard drive – if you have it installed on one. To load a level, you can right click when the level is loading and type in the new name. There are no icons for the levels, but if you want to see them, you can load them into a picture viewer. If you want to copy them across, use a file manager, the Shell or select Show All Files from the Window menu in Workbench. To use these levels, you need the original worms game (obviously)!





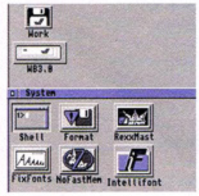
Try out some new custom levels for the great *Worms*.

READ ME!

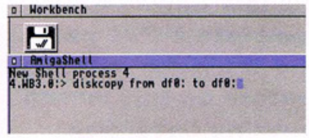
I know that we always say that you should always have your Coverdisk write-protected, but this time, you must have the disk write-enabled in order to load the game as your position is saved to disk. Make sure that you make a copy of your Coverdisk before playing the game. If you wreck your Coverdisk because you don't, then don't call us. You won't get any sympathy!

BACKING UP YOUR COVERDISK

Copying your Coverdisk is really very simple. Just follow the stages below...

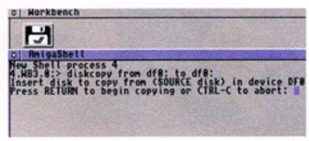


1 **Boot up with your Workbench disk and find the Shell icon, in your system drawer. Double-click on this to go into the Shell.**

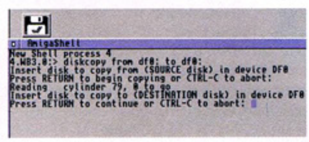


2 **Type in the following line (with a *zero*, not the letter O), taking care to put the spaces in the correct places:**

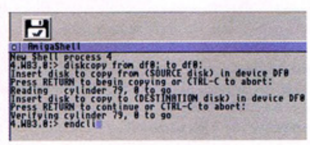
DISKCOPY FROM DF0: TO DF0:



3 **When asked for the Source disk, insert your write-protected Coverdisk and press Return. All of the info on this disk will then be copied from the disk into memory.**



4 **Once your Amiga has read the info, it will ask for the Destination disk. Insert it and press Return. All information on this disk will be destroyed.**



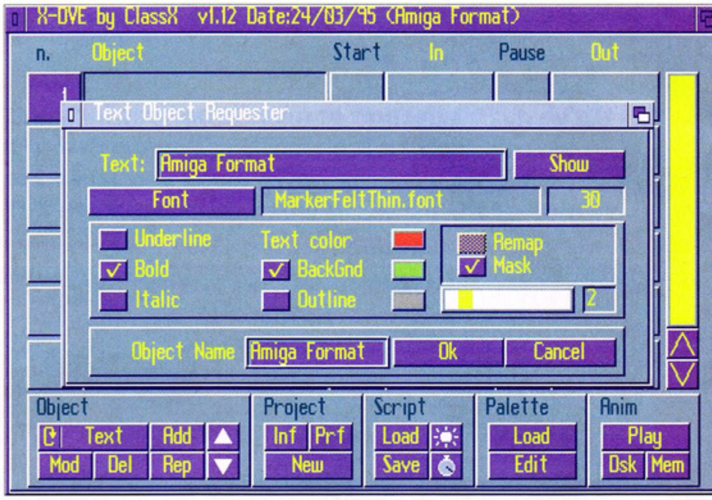
5 **On an unexpanded machine, the Amiga may ask for the source disk again, because it copies in chunks. Finally, type *endcli* to close down the Shell.**

DISK NOT WORKING?

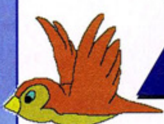
We take every care to test the Coverdisk software, but Future Publishing cannot accept any responsibility for any damage occurring during its use. If your disk is faulty, send it back, including an SAE, for a free replacement to:
***Amiga Format* (insert name of disk)**
TIB PLC
TIB House
11 Edward Street
Bradford BD4 7BH



David Taylor brings you the low-down on the complete *X-DVE* package and the other utilities that feature on this month's amazing Coverdisk.



The object requestor for text allows you to set the text, font, colour and type.



X-DVE

There is one area of computing where the Amiga is still considered streets ahead, despite years without a new model and that's video. Any Amiga owner can dump their output to video thanks to the fact that the Amiga has always been TV compatible. For better quality and more professional video work, more specific hardware is required, but the Amiga alone can be used to start with and it can grow with you. This concept is alien on any other platform.

With this in mind, *X-DVE* is a package that should have everyone with artistic leanings itching to play. Essentially, *X-DVE* is a package which can create animations and although initially intended for video titling it can also be used for more general art work. *X-DVE* even has its own file format which means that animations are faster and smoother than the Anim format we have become accustomed to in *DPaint*.

Standing for eXtended Digital Video Effects generator, it consists of an integrated environment for creating animations and can handle running animations of anything up to 10,000 frames consisting of up to 100 simultaneous, independent objects!

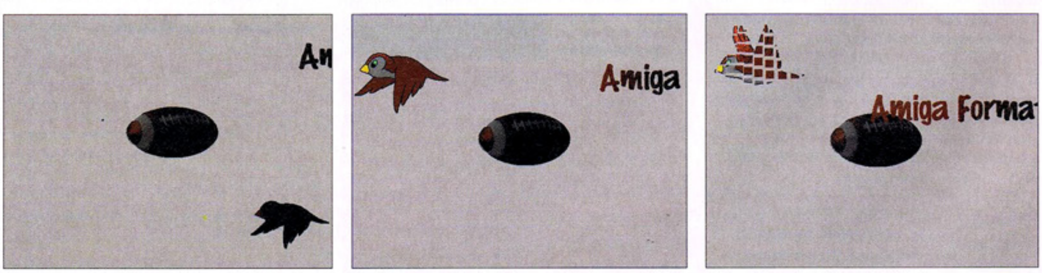
GETTING STARTED

Although *X-DVE* is a remarkably powerful program, it is very easy to use. Taking each element a step at a time, you can soon create the most amazing animations. When you have installed the software (see the box concerning installation), you need to start the program and begin a new project. Even though the screen starts up as a blank project, you must actually click on the New button in the Project section because certain parameters, like screen resolution and the number of colours has to be selected before you start.

With a project started, all you need to do is add in the objects and you'll have a full animation. An object can be one of three things: a string of text, an IFF brush or an IFF animation brush. The IFF brushes and animations are the type used by *DPaint* and other paint packages. To select the type of object, you scroll through them in the Object section. Once you have selected the type, click on Add and a requestor will pop up asking you to select the file you want to use. In the case of the IFFs, you select the brush or Anim brush and for text, you simply enter the text in, then choose the font, style and colour. If you want to check how any of them look, click on the Show button in the requestor and it will be displayed.

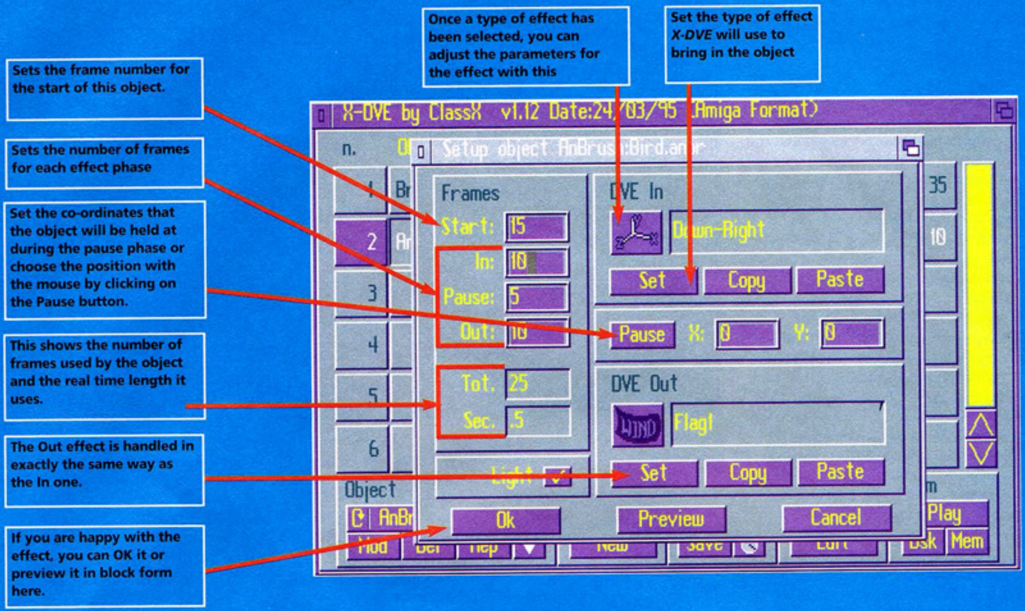
SETTING FRAMES

When you OK the selection, the object will appear in the Object listing. You now click on the right hand side of the Object and another requestor will appear, showing the setup for that object. Obviously this starts out blank. In the frames section, you need to set the start frame, which is the frame number at which this object will become active. Bear in mind that



These are a series of frames from a single simple animation. You can see that we have combined some differing effects with various different objects.

THE OBJECT SETUP WINDOW

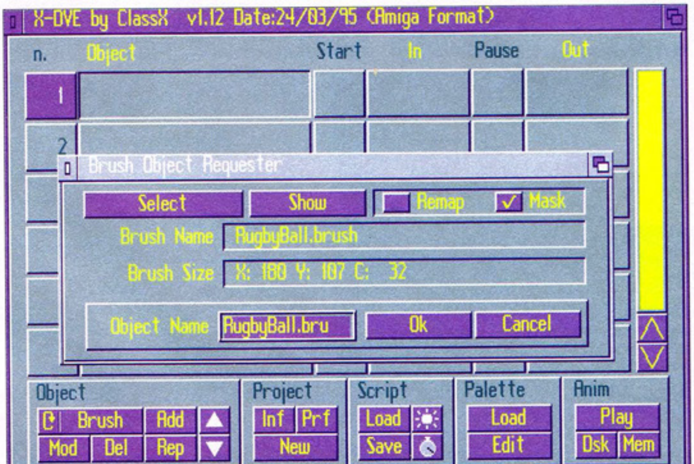


X-DVE runs at 50 frames per second. You then set the In frame number – which is the number of frames over which the effect will bring in that object, the Pause number – which is the number of frames that the object will remain on screen without any effect being applied and then the Out number – which is the number of frames that the effect will use to remove the object.

The advantage of having the objects controlled like this is that you can have multiple objects brought in at different frame numbers, using a different number of frames to appear and disappear.

On the right of the requestor, there are three sections the In, Pause and Out sections. Clicking on Set in the DVE In section gives you the choice of three types of effect: Move, Slide and Wind. The Move effect brings the object into the animation by physically moving it across the screen from the direction that you select. The Slide option allows you to bring the object in by a variety of sliding effects, such as rotation or splicing. The Wind effect is another selection of miscellaneous effects that will bring the object in by splitting it into sections and joining all the sections together over a set of frames in the manner you choose. You can also choose where the effect centre will be on the object and how big the sections of the object will be. There is also a fourth selection, which is

Continued overleaf ➡



The brush requestor enables the user to set simple IFF brushes as objects.

READ ME FIRST!

The minimum requirements for *X-DVE* are a 1Mb Amiga with two floppy drives, but as you would expect for an animation effects package, the better system you have, the more you will get out of the program. More memory and a hard drive are recommended. To install the software, boot Workbench. If you are installing to a hard drive, use the *X-DVE* installer for the main package and the Extras (hard drive) installation script. If you are installing to floppies, use the *X-DVE* installer and install only the main program as there isn't room on a single floppy for the complete package. You will need a stripped down version of Workbench with space on for the libraries and fonts. Make a copy of Workbench and delete some of the sections and use this only for *X-DVE*. The rest of the package can be installed using the *X-DVE* part 2 script, which will install the extra utilities to this new floppy too. If you want to install the extras alone, you can do this using the separate Extras installation script. When you install to floppies, make sure that the Coverdisk is in the external or second drive (df1:) and that you have two spare, formatted floppies which need to be inserted into the internal drive (df0:).

blank for when you need to delete any effects chosen.

Each of the different effect types has its own requestor which allows you to choose the specific effect and how "big" it is. For instance, if you decide to bring an object in by imploding all the sections, you'll want the radius of the effect to be larger than the screen so that all the elements come in, rather than simply appearing from nowhere.

If you want to preview an effect, you can do so in the Setup Object requester and the effect will be shown using a set of blocks. If you then decide that you want to change the effect, you can modify the selected effect by clicking on its icon or select from one of the three different types of effect by clicking on Select.

The Pause section determines where on the screen the object will be placed – that is where the In effect will bring the object to and where the Out effect will take it from (remember that you set the number of frames that it will remain in the Pause position in the Frames section earlier). You can enter the position by entering the X and Y co-ordinates or by clicking the Pause button and positioning the object with the mouse.

The DVE Out section is identical to the In section and controls the effects for removing the object.

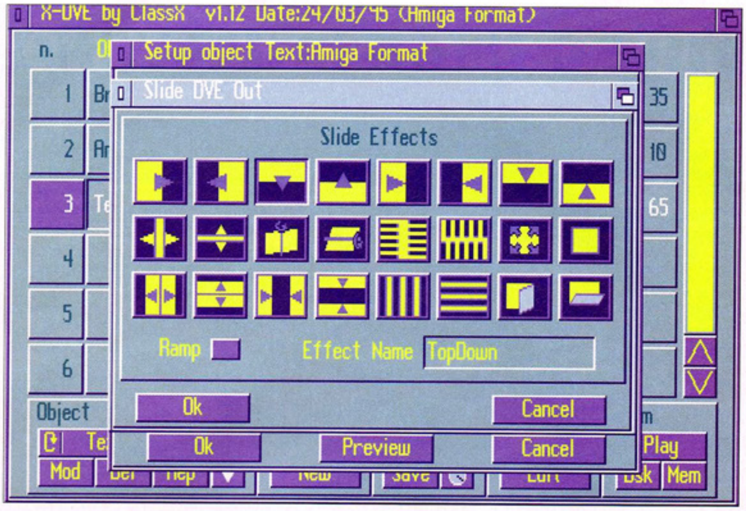
When you have set all the parameters, you can move on to the next object and build up a complex animation or titling sequence piece by piece. If you want to have a backdrop for the entire animation, simply choose an object and set it without effects to be held in Pause throughout the whole animation.

BUILDING A SCRIPT

As you enter more objects, you will build up a script for the animation (there are several demo scripts including with the package). You should save this script periodically so that you can not only keep the final animation, but also all the elements so that you can change things easily. If you get confused by the number of frames each object uses and where it is placed in the animation, you can see this by clicking on the Clock icon in the Script section. This will open the Display/Setup Frames window which shows a graph with each bar split into the three sections, so you can see how they all fit together. If you want to adjust an object so that it fits better with another, simply click on the Object in this window and you can change the frame numberings.

When you have set the animation as you want, you can render the animation, either in memory or to disk as a set of IFF frames. If you render the animation in memory, you can save it out in the new XFA format. There are different types of compression available too. If you want to play an XFA animation without *X-DVE* or convert an animation to IFF format, you can do this using the separate XFA Utility supplied. There is much more to this package than we can deal with here, so do read the complete AmigaGuide reference that is in the package.

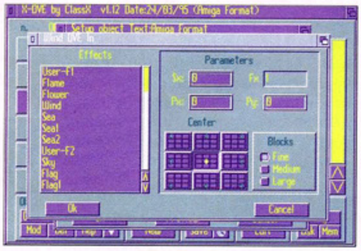
And when you've finished being amazed by the excellence of this version of *X-DVE*, you can take up the special *Amiga Format* offer to upgrade to version 2 with all the new features it offers – see page 111 for details.

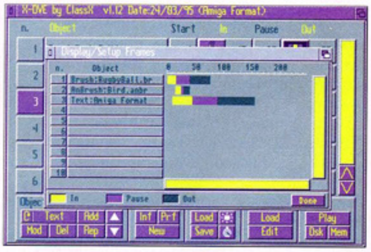


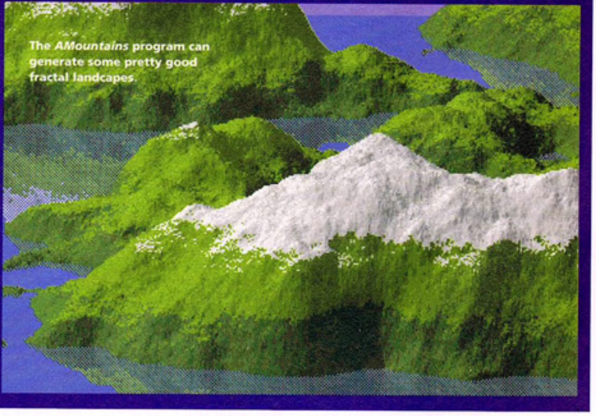
The Slide effect window has 24 different slide effects.

BELOW LEFT: Wind effects can be used with objects and there are loads of them to choose from.

BELOW RIGHT: The Display/Setup Frames window shows you how each object fits into the entire animation.







The *AMountains* program can generate some pretty good fractal landcapes.

EXTRA UTILITIES

There are also another three utilities included on this month's disk. The first is a fractal landscape generator called *AMountains*, which can create a spectacular scene (tip: if you want to save out a scene, then use a screen grabber).

There is also *NTeddy*, a virtual Teddy bear(!) that you can zoom around, from the creator of the excellent *Navigator* programs. There's also a short hack which can make your window titles scroll animating text.

All these programs have different system requirements, which we haven't got room to cover here, but read the docs for each program to find out.

AMIGA FORMAT COVERDISKS



EXTRA!

Your Coverdisk should be working fine, but if it's not, these hints, tips and corrections should sort out the problem quickly and easily.



ZEEWOLF 2 (*AF81*)

Many readers have phoned in saying they are having problems with *Zeewolf 2*. One meg A500 users who have two floppy disk drives should disconnect the external drive to make more memory available to the game. Unfortunately *Zeewolf 2* just doesn't seem to work at all with some accelerator cards.



FINAL WRITER 4 LITE (*AF82*)

If *Final Writer*'s pull-down menus won't pull down it is probably because you are running a menu enhancement commodity (i.e. *MagicMenu*). Such programs don't work correctly with *Final Writer* and should be disabled. In order to print documents it is vital you have the correct printer driver installed in the devs/printers drawer of your Workbench disk and that the driver is selected and configured using the printer prefs utilities. Your Workbench manual describes how to do this. To print larger documents *Final Writer* requires more memory. If you're using the program on a 2Mb machine, try to maximise the amount of memory available by removing any utilities or commodities running in the background – if you still experience problems, use Workbench's prefs utilities to alter the screen to a lower resolution screenmode. Lastly, it was inadvertently stated that *Final Writer* works on all 2Mb+ Amigas. Sorry, but it's incompatible with old Kickstart 1.2/1.3 machines.



BREED 96 (*AF86*)

If when double clicking the *Install_Breed96* icon you get an error message telling you that the command *IconX* cannot be found don't panic. This doesn't mean that your Coverdisk is faulty, it's just that some earlier versions of the Workbench disk don't contain the *IconX* command. To get around the problem; from Workbench open up a Shell window and type the following lines (pressing return after each):-

```
copy c:execute RAM:
cd RAM:
execute AF86b:Install_Breed96
```

Have your blank formatted disk and your *Breed 96* disk ready and insert the appropriate disk when prompted. Please note that even though the labal for the *Breed 96* disk says "*AF*86a" it is, in reality, disk number *AF*86b.



OCTAMED TUTORIAL (AF86)

If you are a Workbench 3 user experiencing problems in trying to read the *OctaMED* tutorial guide document then try changing its icon's default tool from "Amigaguide" to "MultiView". If you are unsure of how to do this don't worry it's not too difficult. Click once on the icon called *OctV5_Tut.Guide*, pull down the "Icons" menu from the menubar at the top of the Workbench screen and select the "Information" menu item. This will bring up a window, in which halfway down you will see the words "Default Tool:" followed by a small box containing the word "Amigaguide", clicking in this box will give you a text cursor, now using the backspace and del key erase completely the word "Amigaguide" and type in the word "MultiView", press return then click on the Save gadget (bottom left corner). It's worth remembering that the same solution should work for other Coverdisk document files that try to load tools (e.g. *Muchmore*) that you don't have.

MISSING TOOLS?

A common problem is that not everyone's Workbench disk has a copy of the Amiga *Installer* tool on it. Once unpacked, some Coverdisk software needs "installing" before it can be properly used. The authors often include a script that will copy the required libraries, fonts etc. to the correct place on your system. The icon for the script is usually a picture of a floppy disk with a wire and plug coming out of it. If you get an error message *Unable to open your tool 'Installer'* when you double-click such icons there is a solution. You need to find and then copy the *Installer* tool from another disk to your Workbench floppy disk or Workbench hard disk partition. If you are using floppies then use a copy of the Workbench disk and not the original, also you may need to make some space on your copy of Workbench by deleting some non-essential tools such as the clock, calculator etc. The *Amiga Format* Coverdisk 79a, *Digita Organiser 2* demo has the *Installer* tool on it. If you don't have that Coverdisk then try searching for *Installer* on disks belonging to other applications that you own, especially paint programs, word processors etc. *Installer* doesn't usually have an icon and is often in a drawer such as the C drawer which itself rarely has an icon. So when looking for it make sure that you switch on Show:All Files from the Workbench Window menu for every disk and drawer you look through. When you find *Installer* simply copy it by dragging its icon into the Utilities or C drawer of your Workbench.

GENERAL PROBLEMS

The most common problems are Read/Write or Checksum errors which occur during the decompression process. It is important to note which disk is in the drive when such errors occur – is it the Coverdisk or one of your own disks? If it's one of your own disks then that's the disk with the problem. Did you format your blank disks correctly? Try re-formatting them and do a full format not just a quick format, use the verify option and make sure you format from your Workbench, not from utilities like *X-Copy*. Disable *Directory Caching*, *Trashcan* and *International Mode*. Don't decrunch to HD (High Density) disks as these can be unreliable. **Always write protect and back up your Coverdisk *before* you use it.**

FAULTY DISK?

Please remember that the technical helpline above is purely for difficulties you have getting the programs to work properly. If your disk is physically damaged, bent, broken with a loose or missing shutter, it should be returned to the duplicators for a replacement at the following address:

AF DISK NUMBER XX
TIB PLC
TIB HOUSE
11 EDWARD STREET
BRADFORD BD4 7BH

This includes any system messages you may get saying: **"Read/write error"**, "**Disk invalidated**" and "**Checksum Error**". In this case, the disk has been damaged and needs to be replaced.

UPGRADE OFFER

X-DVE 2.50

at an exclusive Amiga Format price...

When you have finished reeling at the power of *X-DVE* version 1, you'll be pleased to learn that the new version 2.5 is now available offering even more features at a special price. Don't miss out on:

- **ARexx support**
- **Datatype support for images and animations**
- **Full light sourcing effects**
- **34 slide effects, 40 Warp effects**
- **Optimised code for maximum speed**

Minimum System requirements:
Workbench 2.0+ 1Mb Chip Ram 2Mb Fast Ram
Suggested Configuration:
A1200 + 68030 + FPU + 8Mb Fast Ram + HD

ORDER CODE: AFCXDV

£39.99
Including P&P and VAT



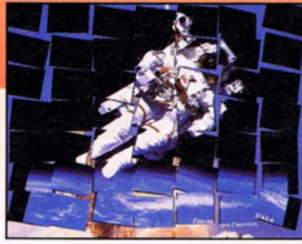
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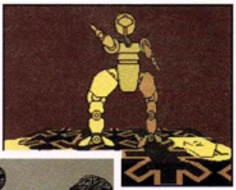
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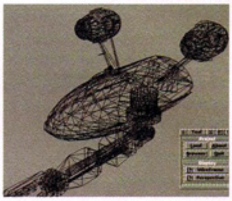






AMIGA FORMAT COVER CD







On your super soaraway AFCD this month you'll find the following goodies.

This month the CD mutates yet again, this time to better match the way the magazine is laid out. There are sections for serious software, ScreenPlay has all the games stuff and Public Sector will contain demos and slide shows, etc.

The directory named resources in the past has been renamed to In_the_Mag and it contains additional info for the tutorials in this month's AF and some of the graphics that went to make this issue.

Although this month's CD doesn't contain a full 650 megabytes of data, we think that what you'll find is of such a quality as to keep you fully enthralled until next month anyway. As you can see, we are always on the look out for more reader submissions and we are very flexible when it comes to the way you want to send them in.

If there is anything in particular you are looking for on our CD in the future, just ask us, and we'll do our best to fit it in. You may even get a prize!

TOP: See lots of YOUR artwork in Gallery.

MIDDLE: Showobj is something 3D people can't be without.

RIGHT: The best pinball game ever – play this demo and you'll see.

READER SUBMISSIONS

As you can see from the ReaderStuff directory on this month's CD, we've had a good response from you all, but it's just not good enough. Go on, send us that animation you've been working on, send us program – we can handle double density and high density floppy disks, Zip, Jaz and EZ135 cartridges, DAT backups, basically, anything you need to use to send us your stuff. Don't worry, we'll send your media back if they are more expensive than floppies.

We got plenty of new MODs this month, which is great, but we need more, more, more! As an added incentive, from this issue on, we are going to be giving a prize of £30 for the best serious reader submission, the best reader game and the best reader tune that we receive for the CD. From next month you'll be able to look out for the special drawer marking a winning entry, but for this month our winners are:

★ WINNERS ★

Marco Vigelius for his superbly innovative Cartoon Studio program.

Da Tran for his speedy, if a little tiny, Doom-type game Boom

and the AF music prize this month goes to:

Greg Tuby for his mod "everyone go m" with its crazy kazoo sample...





If this is the icon used for the drawer with your name on it, then you're an AF winner!



GENERAL ADVICE

Most of the programs are designed to run straight from the CD, thus saving your hard disk space, but they often need assigns to make them work properly. If you see icons like these two in a drawer you should double click on the one with the arrow pointing to the right before you start using the program, and double click on the icon with the arrow pointing to the left once you've finished with the program.

If there isn't an icon, but the program still asks for assigns, your best bet is to install the rather excellent and terrific MultiCX (AFCD4:Serious/Shareware/Workbench/MultiCX 2) to your hard drive and run the program. One of MCX's abilities is to allow you to assign things on the fly and this can be a big help. If you find MCX's tooltypes a bit of a headache to handle, then you should install MCX Prefs (the MCXP316 drawer in the same directory as MultiCX). This gives you a GUI prefs tool with which you can change MCX's settings.



ANIMATIONS

You'll find John Allardice's atmospheric and technically superb intro and outro for Alien Breed – Tower Assault here along with the Amiga Format intro and an MPEG animation of Urban Müller, the coordinator of the whole of Aminet, juggling with some gigabyte drives

READER STUFF

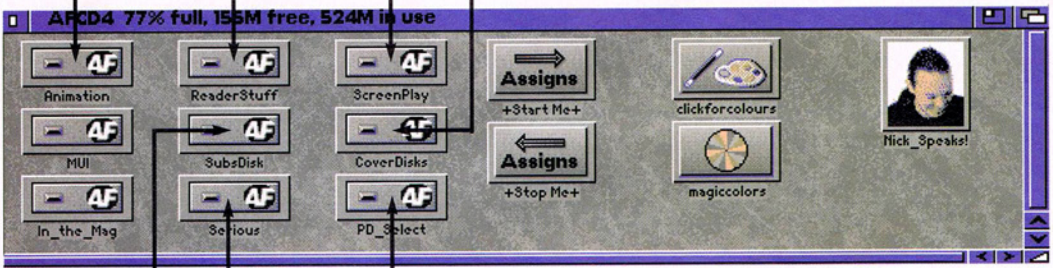
You'll find out whether you have been digitally immortalised by checking the names on the drawers in here. You'll also find the Gallery filled with some of the best artwork we have yet received. In particular, have a look at our prize winners' contributions, Femi Hasani's video backdrops and Iain Wilson's in-depth coverage of the Euro 96 football tournament.

SCREENPLAY

Check out this drawer to find demos of commercial games like Alien Breed 3D 2, SlamTilt and XP8, great shareware titles like Knockout 2, Nemac 4, Testament and Spherical Worlds and gaming utilities like the latest version of F1GP Ed and Worms levels. How much fun?

COVERDISKS

If you are upset because you bought the CD version instead of the disk version and missed out on the full version of X-DVE, you shouldn't worry as you'll find both AF88 disks in the coverdisks drawer. The disks aren't DMS'ed so you should be able to run them direct from the disc.



SUBSDISK

If you're not a subscriber don't even bother trying this drawer, right. It contains a top secret file that has been so totally encrypted you just won't ever be able to crack it. And only subscribers have the CODE RED password. See how much fun subscribers have? Doesn't it make you wish you subscribed too?

SERIOUS

Demos of the new *Storm C* compiler, *ImageVision* and EMComputergraphic's *Phase* CDs, our choice of the best new shareware utilities and tools, plus a bonus for readers of Amiga Shopper – the complete 'Best of Shopper PD' archive.

PD_SELECT

You'll find some of the latest and greatest demos here, but be warned, some of these epics don't return you back to Workbench. Just make sure you've got everything saved before you run them and you shouldn't have any bother.

Icon see for miles and miles...

We are particularly on the lookout for icons for the AFCDs. What we need is icons for the following file types:

- animations
- pictures
- mods
- Programs

(some demos, etc. don't have icons)

and anything else you can think of. We would prefer them to follow the MagicWB style (although we'll look at anything) and if we choose your set, you'll get a big thank you and your icons used forever after on our CDs... isn't that nice?

DISC NOT WORKING?

If the CD is defective, please return it to the address below. Please make sure you have followed our installation procedures correctly to ensure that there is a physical problem. Please send the CD along with a description of the fault plus a self addressed envelope. Return postage will be paid. Ablex Audio Video Limited, Harcourt, Halesfield 14, Telford, Shropshire TF7 4QR

A CD should only need replacing if the CD itself cannot be read. If, instead you are experiencing problems with an individual demo or application phone our technical support line. This is open between the hours of 9.30am and 6.00pm on Tuesday. Tel: 01225 442244. Fax: 01225 732341. Email: amformat@futurenet.co.uk

Please note that the helpline staff provide assistance with technical problems directly related to our cover CD and cannot provide training on the software or hardware in general.

Tower of Power

A4000s, if you can find them, are, lets face it, just too damn expensive. But you can have the power and flexibility of a big box Amiga for a very reasonable price, if you have an A1200, a decent socket set and the will to use them. Tower expansion kits are the future for users wanting to expand their A1200. Next month we will be looking at all the options (including building your own systems) so you can decide the best way forward for you and your Amiga. And we'll probably have lots of other stuff too...

October Issue On Sale Thursday 29th August


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On this issue's CD

The full version of the incredible X-DVE titling package is yours to create your own presentations, multimedia backdrops, cunning animations and more.

PLUS: Demos of the excellent Storm C compiler system, MMExperience, ImageVision, and many other CDs.

But the best bit is there are hundreds of megabytes of YOUR work on the CD, from animations to utilities, pictures and programs. You'll also find game demos, the best shareware games, utilities and tools.

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